

Engineering
Library
JUL 13 1918
UNIV. OF MICH
LIBRARY

THE ARCHITECTURAL REVIEW

A Magazine of Architecture & Decoration.



Porch to Chandos House, Chandos Street, London.
The Brothers Adam, Architects

JUNE 1918

27-29, Tothill St., Westminster. London. S.W.

VOL. XLIII

TWO SHILLINGS NET

NO. 259

Ruberoid ROOFING



FOR
DURABILITY—EFFICIENCY—ECONOMY

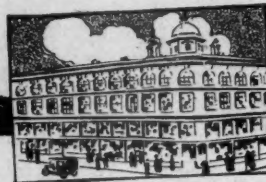
THE remarkable permanence of RUBEROID is always a source of satisfaction and saving to building owners. As the years slip by it proves its efficiency by ensuring a perfectly dry and rot-proof roof. It costs less to begin with than slate, zinc, lead, or asphalt, and as it

can't crack, oxidise, or disintegrate, you realise why RUBEROID, after 23 years' use, is more extensively specified than any other form of flexible roofing, and is so successful on flat roofs. Now being extensively used on munition factories, hospitals, camps, etc.

OUR FREE
HANDBOOK

Write for our Illustrated Handbook on Ruberoid Roofing. It tells how to obtain better roofs at less cost.

THE RUBEROID CO., LTD., 1, Waterloo House,
Knightrider Street, E.C.



HAYWARD'S LIGHTS and BUILDING SPECIALITIES.

- I. Hayward's Pavement Lights, Flaps, etc.
- II. Hayward's Circular Lights and Coal Plates.
- III. Hayward's Iron Staircases.
- IV. Hayward's Ventilators.
- V. Hayward's Stable Fittings (Cottages).
- VII. Hayward's "Jhilmil" Steel Lathing.
- VIII. Hayward's Radiators and Boilers, etc.
- X. Hayward's Steel Casements and Sashes.
- XI. Hayward's Ornamental Lead Glazing.
- XII. Hayward's Patent Reform Roof Glazing.
- XIII. Hayward's "Copperite" Fire-resisting Glazing.

Write for Catalogues and full information to

HAYWARDS LTD., Union St., Borough, LONDON, S.E.

Tel.: HOP. 3042.



Hayward's Patent "Putty Grooved" Steel Casements and "Prior" Lead Glazing. Don't have Wood Casements—Use Steel, which keep WEATHERTIGHT and DRAUGHTLESS.

ALSO AT 3, Simpson Street, MANCHESTER, and 141, West Regent Street, GLASGOW.

44



Plate I.

June 1918.

LOTHBURY AND THE BANK OF ENGLAND.

From an Etching by Hanslip Fletcher.

(See p. 130.)

PORCHES AND HOODS OF THE ENGLISH DOMESTIC RENAISSANCE.

By LIEUT. HAROLD F. WALKER (R.A.F.), A.R.I.B.A.

THE doorway, from the nature of its function, must necessarily be the most important feature of a building.

It has been accentuated from the time of the Egyptian buildings with their flanking pylons, down through the Greek and Roman periods, when the huge porches with their columns and peristyles flourished; on through the Byzantine era, when it took the form of the narthex and atrium; still on down into the Gothic times, when the deeply recessed doorways and porches with their splendid carving and sculptured figures gave that seemingly restless richness, in some degree an expression of the state of affairs at the time of their erection; until with the Renaissance it assumed a quiet dignity compatible with the spread of the new learning and the majesty and power of knowledge. In this article it is proposed to confine attention to doorways of English Domestic Renaissance, because it is felt that these have peculiar application to modern requirements.

Before referring to any specific examples, the different requirements and circumstances which influenced both design and designer should be noted under two distinct heads, viz.: Climate and Material.

The provision of a porch or hood to the doorways undoubtedly arose from the necessity for protection from the weather, although it might be argued that such features as the peristyles of the old Greek temples and the narthex of the Christian churches were primarily intended as a promenade or place of assembly. That some such idea has been traditionally handed down may be deduced from the fact that even to-day the porch of the country labourer's cottage and that of the village inn are still used in summer-time for the meeting of cronies and for friendly intercourse; and the porch in summer takes the place of the fireplace in winter as the centre of the home life of the house.

In the larger houses, protection from the elements was required for visitors alighting from vehicles, and porches extending well in front of the house and placed as close to the carriage-way as possible were supplied, and reached their apotheosis in the elaborate *portes cochères* so often seen

in French buildings. An English example is shown in Fig. 13.

It is well known that the commoner people speedily follow the lead of their betters; and the value of porch and hood as an adjunct to the doorway rapidly became apparent, and led in course of time to the introduction of numerous varieties. The local material also had a considerable effect

upon the design of the building, which necessarily included the doorway, and thus different districts show their own peculiar method of development.

Stone, brick, and wood all have their special adaptabilities; and their influence on the architectural treatment, more especially of country buildings, can quite readily be noticed in the early examples of the Renaissance. In later times, however, the increased speed and ease of transport made a greater choice of material possible, and facilitated the generalization of method and a wider exchange of ideas.

Wood came into vogue as the material for the ornamentation of doorways at the beginning of the eighteenth century, and owing to the comparative ease of manipulation, its durability when painted and the upper surfaces covered with lead, as was usual, it had distinct advantages, particularly in moderate-sized houses; and a marked advance in the amount of elaboration was also visible.

During the Gothic period, craftsmen attained such an intimate and masterful knowledge of the Gothic principles of construction and design that they were rather loth to experiment with the new style of Italian architecture of which they knew so little, and the principles of which at first they did not seem to grasp. Thus it was that they experimented with tombs, fireplaces, doorways, etc., not daring to risk more than one or two features in the new style. In consequence, we have in the earlier examples buildings essentially Gothic in character with a Renaissance doorway, fireplace, etc.; flat pilasters, at first tentatively employed, later blossomed out into applications of the full Order, with detached columns. Moreover, the new style entailed considerable restrictions, which



Fig. 1.—CHASTLETON HOUSE, OXFORDSHIRE.

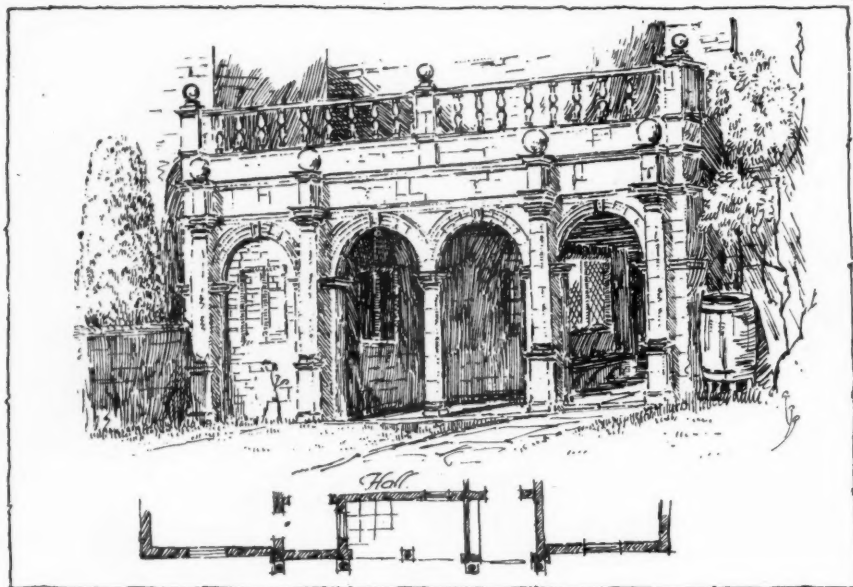


Fig. 2.—HAMBLETON OLD HALL, RUTLAND.

one would imagine offered little inducement to the conservative instincts of our islanders, who were already practising a fully developed style which thoroughly met their requirements and enforced no such restraints.

Again, the Renaissance first came to us through the medium of Continental countries, and not direct from Italy, the place of its birth; consequently by the time it reached England it had added to itself other influences, not always in keeping with its original character; and it was not until men who had actually studied in Italy and returned to this country imbued with the knowledge and fascination of the new style as practised at the fountain-head that the general principles and possibilities were realized and accepted by the nation at large.

Further, the new style was at first promulgated by Italian craftsmen imported to this country in large numbers in the reign of Henry VIII; but the unsettled state of the realm during Mary's reign, and the subsequent accession of Elizabeth in 1559, with the resultant repudiation of Roman influences, induced the greater number of these craftsmen to return to Italy; and at the same time we witness a large influx of Dutch and German refugees fleeing from religious persecution. These men, although working in the new style, were much inferior to the Italians in knowledge, and worked from pattern-books of designs obtainable from Antwerp. The English craftsmen, however, speedily surpassed them in executive power, and they were relegated to a position somewhat analogous to that of the modern painter and decorator.

Our subject is naturally divided, as its title suggests, into two parts—(1) Porches and (2) Hoods—but it is often impossible to differentiate between, first, porches and doorways, and, secondly, doorways and hoods; the one merging into the other by almost imperceptible degrees. To enable some distinction to be made in the selection of examples it is proposed to define a porch as a doorway which has a decided projection in front of the entrance door, and a hood as a separate decorative feature over a doorway.

Porches may be recessed, and an example of this kind by the Brothers Adam is shown in Fig. 12, but we shall consider mostly those which form a distinct addition to the main building of the house.

It will be convenient to take the year 1600 as a starting point, not because that year saw the commencement of the Renaissance, which undoubtedly showed itself in small isolated examples before that date, but because it is generally accepted as the close of the mediæval period.

An early and a very interesting example, built about the year 1603, is shown in the illustration from Chastleton, Oxfordshire (see Fig. 1). Until the beginning of the seventeenth century it was apparently the custom to place the main doorway in the centre of the length of the building; but as the entrance to the great hall had to be made from the screens at the end, it followed, as a matter of course, that the hall itself occupied only a portion of the façade, either to the right or left of the doorway. The hall being usually of greater height than the other rooms, necessarily gave a somewhat unbalanced front, which, although eminently picturesque in such buildings as Penshurst Place, Kent, and Oxburgh Hall, was not at all suited to the symmetry required by the new Classic style. In order to obtain a more reciprocal treatment, the hall must be centrally placed; and the side entrance-porch was boldly projected and made to correspond more or less with the large bay or oriel window which was still retained as the principal feature at the dais end of the hall. This is well illustrated in the Chastleton example, in which it will be seen that the doorway is placed on the return side of the projecting porch;

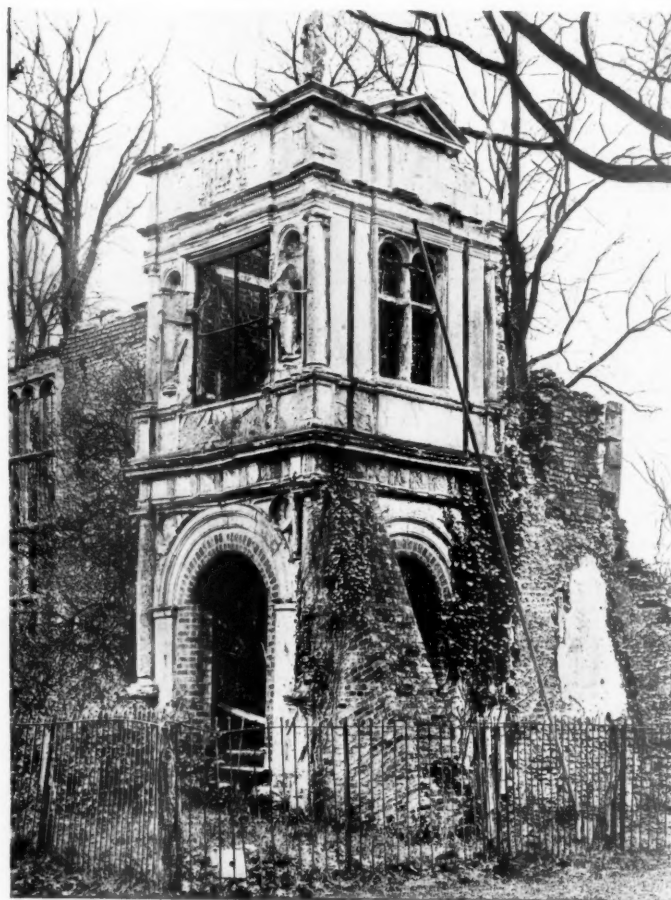


Fig. 3.—GORHAMBURY, ST. ALBANS, HERTS.

thus, while the porch and bay are axial, the actual entrance necessitates a right-angled turn on entry behind the screens, which in this case are still in position together with the dais and bay window.

A further development of this type is seen at Hambleton Hall, Rutland (Fig. 2), a simple example of what is known as an arcaded porch. It is undoubtedly a later feature than the rest of the building, but serves to illustrate the point that the space between the bay and the porch, which in other examples was merely paved and left open, could be covered in and used as a shelter. It will be seen that the two central arches in Fig. 2 form a covered alcove; the right-hand arch is the entrance and the left-hand one the bay. Such an arrangement is quite a common feature

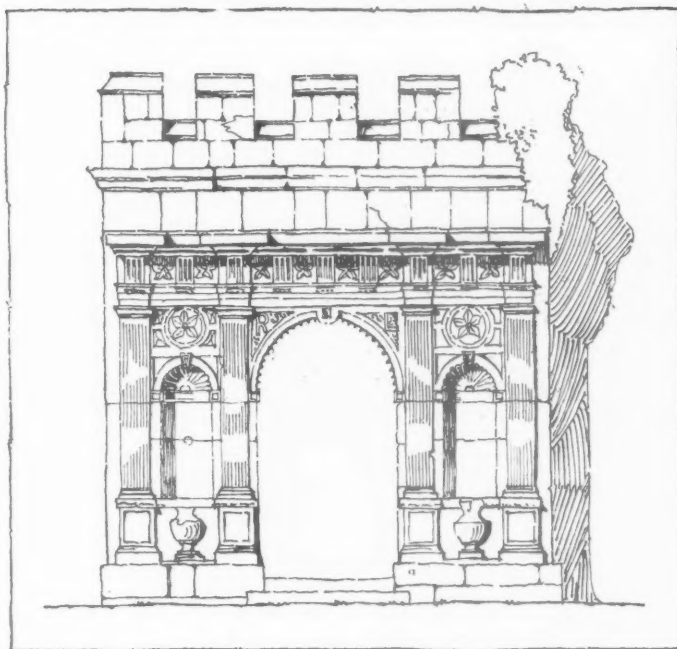


Fig. 4.—GATEHOUSE PORCH, KENILWORTH.

of many present-day country houses, but is not altogether satisfactory, on account of the lack of privacy in the proximity of the alcove or loggia to the entrance doorway; but it enables a certain amount of dignity and breadth to be given to the entrance.

Whilst the development of the main entrance porch combined with the oriel or bay window led to colonnaded loggias, other influences resulted in attempts to treat the porch as the main feature of the building. Much ingenuity was displayed; and the results, although intensely interesting as showing efforts in a style that was not properly understood, were in many cases very incongruous.

Many single-storied porches and doorways were built in which a more or less correct use of the Orders was applied. The

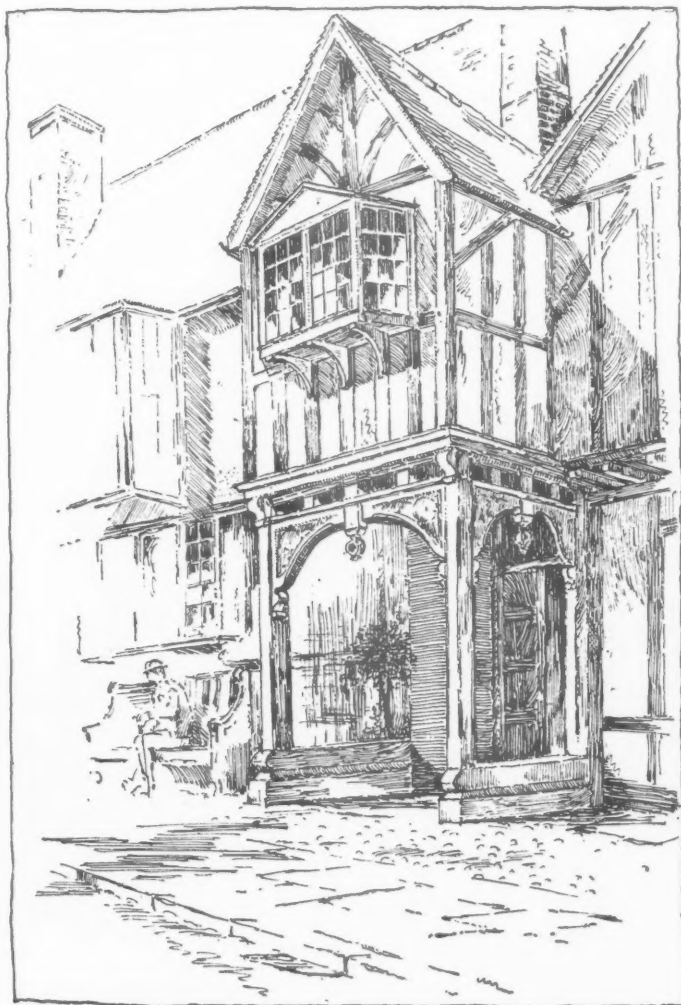


Fig. 5.—AN INN AT WARWICK.

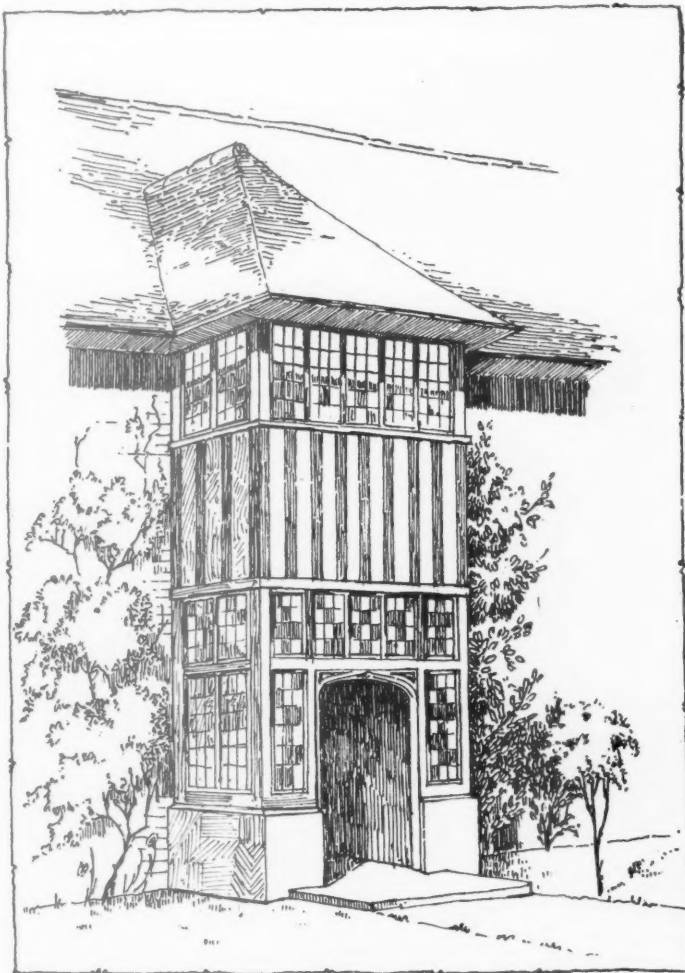


Fig. 6.—GREAT GLEN MANOR, NEAR LEICESTER.
Goddard and Catlow, Architects.

porch to the gatehouse of Kenilworth, shown in Fig. 4, is a very fine treatment, in view of its comparatively early date, with little evidence of the crudities of the time; but it shows, especially in the ornaments over the side niches, the influence of the German rather than the Italian craftsman. The Antwerp pattern-books were probably in use. Similar examples in the form of doorways are to be seen at Wardour Castle, Wiltshire; Cold Ashton, Gloucestershire; and Hatfield House, Herts.

In attempting greater magnificence, it was evidently thought necessary to make the porch more than one story in height, and in this direction some very curious and quaint results were obtained.

Examples of these double-storied porches might be multi-

probably for the more inferior buildings, although such buildings as Kensington and Hampton Court Palaces; Penshurst Place, Kent; and Compton Wynyates, Warwickshire, may be cited to the contrary. Sir Christopher Wren, in the seventeenth and eighteenth century, was a strong adherent to the beauties of brickwork, and used it freely; the charming little building known as the Orangery, at Kensington Palace, testifies to his versatility in this material, as also does the entrance doorway to No. 5 King's Bench Walk, built in 1677 and shown in Fig. 7, although exception might perhaps be taken to the application of brickwork to the Classic Orders.

Timber also, in certain districts, notably in Shropshire, Warwickshire, Sussex, and Surrey, was used for the entire



Fig. 7.—NO. 5 KING'S BENCH WALK, TEMPLE, LONDON.

plied indefinitely. A curious but unsuccessful porch of this kind was attached to Gorhambury, near St. Albans, which was built by Sir Nicholas Bacon, the father of Francis Bacon, about 1570. The building is now in ruins, as may be seen from Fig. 3, but the porch still bears signs of its intended magnificence. The three faces are elaborately treated, the front of the upper story being embellished with two statues in niches, these with busts and medallions. These are very distinctive of this period, and evidently found their prototype in Italian work. The porch in question is propped up by modern brick buttresses, and a brick arch has been inserted within the stone arch.

As previously suggested, local material had great influence upon design. In addition to stone, brick was also largely used,

building. Stokesay Castle, Shropshire, and Speke Hall, Lancashire, show a fecundity of idea which, though somewhat bizarre in effect, is intensely interesting as showing the use of such a material. The inn adjoining the Leicester Hospital at Warwick (Fig. 5), built about 1575, shows a double-storied porch carried out entirely in timber with quaint and somewhat original detail. Other examples, although possibly without the same excuse as this, might be quoted, and a modern example is also shown for comparison (Fig.).

Thus far we have dealt only with arcaded and double-storied porches; we may now consider those very numerous examples of single-storied porches.

The use of the Orders seems to have been gradually



Fig. 8.—Lord Harrington's House, Craig's Court, Whitehall, London.



Fig. 9.—No. 20 Portman Square, London.



Fig. 10.—Chandos House, Chandos Street, London.

Plate II.



Fig. 11.—No. 31 Soho Square, London.

June 1913.

SOME PORCHES AND DOORWAYS OF THE ENGLISH DOMESTIC RENAISSANCE.

100

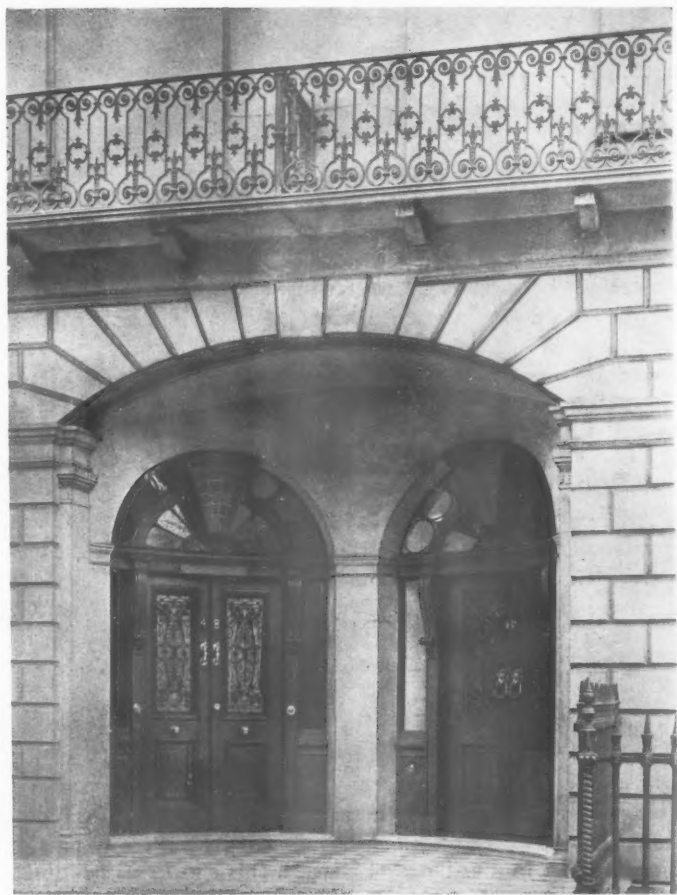


Fig. 12.—NOS 46 & 48 PORTLAND PLACE, LONDON.

accepted as the fit accompaniment to the entrance porch, and our remaining examples show the many variations of their use.

A good example is that from Craig's Court, Whitehall (Fig. 8), built probably about 1702, now in occupation as Government offices, but previously the residence of Lord Harrington. The whole building is very reminiscent of Captain Wynne's house in Lincoln's Inn Fields, known as Newcastle House. The porch consists of isolated Ionic columns, with responding pilasters behind, and carries an entablature, which is broken forward over the columns, only the corona of the cornice running across the porch unbroken. A somewhat heavy balustrading surmounts the porch, which gives the whole feature an overweighted appearance.

This type of porch, with more or less variation, appears to have been used as the model for countless numbers of such structures erected throughout the country towns. At times fresh vigour was infused into the *motif* by such men as the Adam Brothers, Sir John Soane, and the practitioners of the Greek revivals; but the main type prevailed, and may be met with in the great squares and streets of West London, the terraces of Bath, the promenades of Weymouth and Brighton, and other resorts which have enjoyed the patronage of the leisured classes.

The porch at No. 20 Portman Square (Fig. 9) shows a variation of the above *motif*. The building of which it is the outstanding feature is said to be one of the first erected in the square by the Brothers Adam, about 1764. The porch, though not centrally placed in the façade, immediately attracts attention; the treatment of the entablature with a long panel is

characteristic of the Adam period, but the unhappy way in which the first-floor balcony is received on top of the pediment somewhat mars the effect of the otherwise graceful proportions.

Possibly the finest example of a porch by the Brothers Adam is that of Chandos House (Fig. 10). It shows their delightful facility in the design of ornament as well as their refinement of proportion. The graceful fluted columns, with enriched cap and entablature, together with the surrounding ironwork, make up an ensemble which is essentially simple but yet characteristically dignified.

A variation of the last example is shown in the porch from Soho Square (Fig. 11), which seems to combine the treatment of the porch from Craig's Court with that of No. 20 Portman Square. Such porches might also be said to form a class in themselves; and whilst they have been frequently adopted by many well-known architects, it does not appear to be a correct use of the Order. Whether a span, segmental, or semicircular roof is used, the omission of a tie at the base seems to accentuate the thrust upon the side projections, and gives a sense of incompleteness which is non-existent in such a porch as that of Chandos House. Many old examples, however, are to be seen, amongst which should be mentioned a very ornate one at Reigate, Surrey, a segmental-headed one at the Close, Salisbury, and one at Wimborne, Dorset, in which it has been necessary to insert an iron tie at the foot of the roof, to enable the side columns to withstand the thrust. That the type is attractive to some architects is shown by its frequent use in modern work.

(To be concluded.)



Fig. 13.—STAFFORD HOUSE, ST. JAMES'S, LONDON.

AN ACCOUNT OF COUCY-LE-CHÂTEAU.

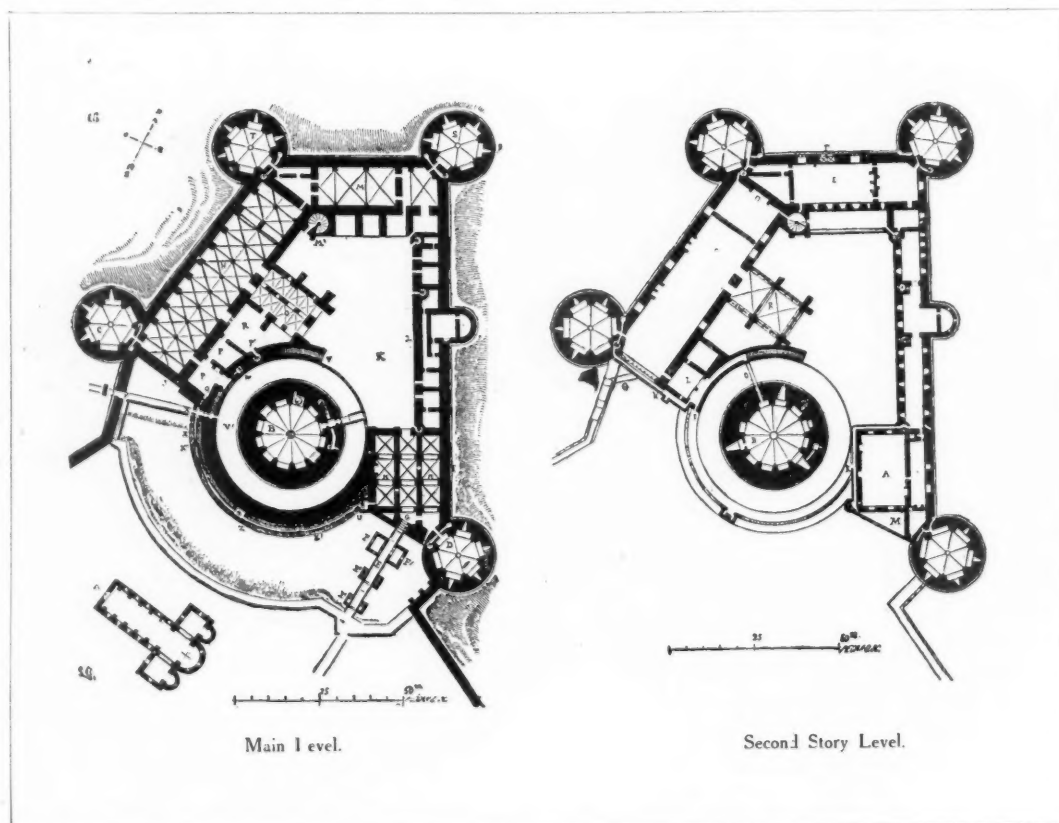
DURING last year's strategic retirement of the Germans to the now historic Hindenburg line, ruthless destruction was visited, for alleged military reasons, upon an untold number of buildings of varying antiquity and present educational value—one of the most notable of these being Coucy-le-Château, the foremost monument of European military architecture of the so-called age of chivalry, up to the moment that it suddenly rose as a cloud before the eyes of the advancing French army.

Coucy, says Mr. Richard F. Bach, in "The Architectural Record," represented one of the most stupendous building undertakings of its time, both as to actual size and as to military strength. It was a typical feudal castle, originally built by Enguerrand III in the thirteenth century, and undertaken as a complete project at the time of its erection, and not, as is so often the case with mediæval buildings, the result of many scores of years of slow accretions at the hands of successive owners. It was later bought by Louis d'Orléans, builder of that other splendid structure, Pierrefonds; passed to the French crown in 1498, and was dismantled by order of Louis the Fourteenth's crafty Italian minister, Mazarin, in 1652.

From the standpoint of defence the position chosen for Coucy was ideal. A total area of some ten thousand square yards, favoured by very steep approaches, was selected at one end of a plateau near the city of Noyon. A considerable section of this area was given over to extensive buildings (see perspective, p. 115) not very strongly fortified, the purpose of which is not now known, and of which only an occasional vault or column remained before the war; there was here, however, outside the heavy walls of the castle proper, a chapel of a date probably much earlier than the thirteenth century.

As in the case of all feudal castles, the main establishment was erected as a dependency of the donjon or keep, an immense masonry tower, amply provided with all needs of sustenance from well to cattle stalls, and catering to all human requirements, from simple military protection to the customary dungeon for the quick elimination of undesirables. The donjon of Coucy gave upon the open plateau area between Noyon and the castle itself (see plans on this page). It was flanked by two smaller angle towers connecting with the donjon

by means of curtain walls, of which one was pierced by the only entrance reached by a bridge defended by three pairs of double towers and thrown across a moat which was itself only 60 ft. in width. The entrance, which was heavily protected by portcullis, thick wooden iron-studded doors, drawbridge, and other accessories, led to a residence building, of which the ground story was used as a barracks; through its centre ran a corridor, vaulted and provided with perforations above, through which missiles might be dropped or lead or oil poured hot. The corridor debouched upon the open courtyard of the castle, while the four-story building of which it formed part connected with and used as a side wall the exterior eastern wall of the whole enclosure. Along this wall were constructed service buildings three stories in height, providing living quarters for domestics or retainers. The north-east and north-west corners were again carried out in form of circular towers; while between them, in the most inaccessible position in the plan, were built the chief residential quarters, again vaulted in the lowest story as in the case of all the other structures thus far mentioned. Following around to the western side of the plan, we find the whole of the available exterior wall space used as part of an immense storage magazine for every manner of material and food provided against an extended siege. Storage facilities were also accounted for in a cellar level beneath this enormous building; in fact, there were a number of such possibilities in the under-structures of practically all portions of the plan, except the courtyard. Projecting from the inner side of the storage

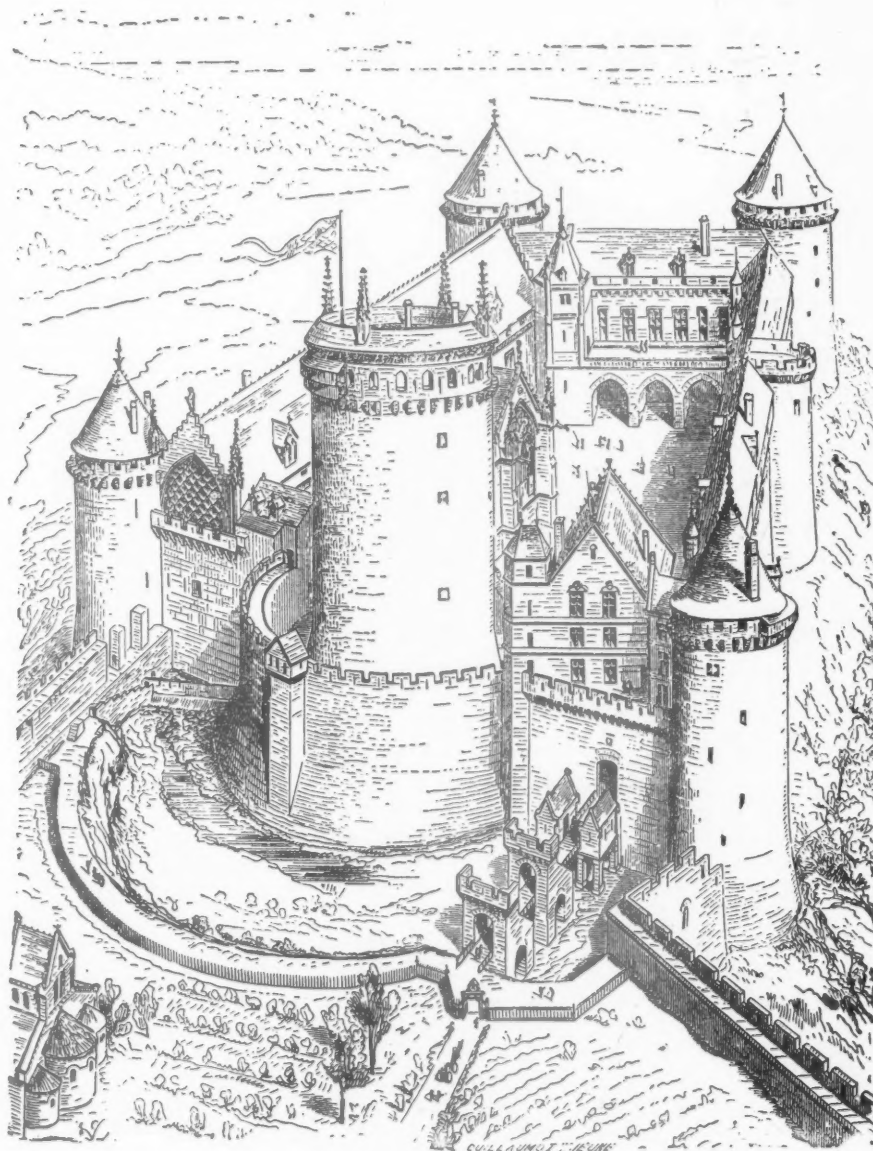


GENERAL PLANS OF COUCY-LE-CHÂTEAU.

building was the castle chapel. Kitchens seem to have been arranged for in the space adjacent to the chapel, but separated by a small yard from it and the donjon which occupies the centre of the southern elevation. The four corner towers had an understructure of three stories—a sort of superposition of three constructed caves—and three more stories above ground level. The height was slightly over one hundred and fifteen feet and their diameter about sixty feet. Besides these dimensions the donjon itself was a mammoth, measuring over two

since it was constructed at the level of the bottom of the moat. At this level also was discovered a spring of pure water which solved a most serious problem; the location of this essential was of greatest benefit to the inhabitants, since it was absolutely inaccessible, except through the entire defences of the building or, to be sure, through treachery.

Properly to restore the buildings of Coucy the imagination must recall the character of the vaulting, the profuse painting of the vaults, the frequent use of trussed roofs and the carving



PERSPECTIVE VIEW OF COUCY-LE-CHÂTEAU.

hundred and ten feet in height and over one hundred feet in diameter. Around the base of the donjon was built an additional walled enclosure, set at some distance from it and forming part of the general curtain wall. In one end of this enveloping arc a small postern, with the usual protection of heavy doors, ceiling perforations, etc., made possible an exit to the escarpment on the opposite side of the moat; while the base was penetrated throughout its curve by a passage contrived no doubt as a means of detecting mining operations,

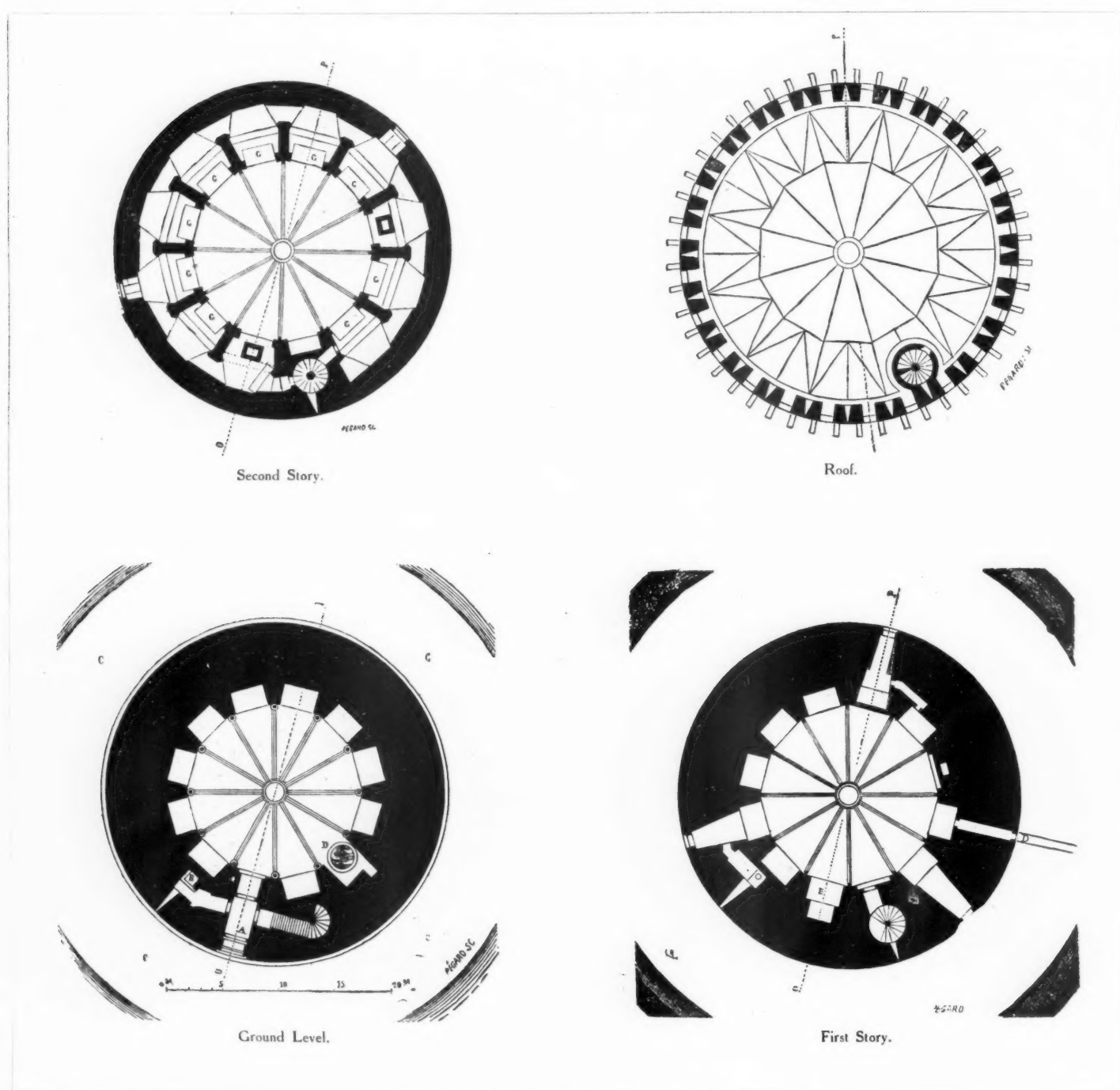
of projecting members, the delicate carving of capitals and occasional window treatments, not to mention the general architectural excellence of the chapel itself. To crown the whole effect we have the general quality of picturesqueness due to site and, in addition, also to man's efforts to circumvent possible attack.

The donjon of Coucy will merit a more detailed description, for in the days of its early greatness the donjon was the proper residence of the feudal lord or seigneur. This giant

structure was contrived in the form of an exact circle in plan, accessible from the courtyard of the castle only by means of a very narrow door and passage-way with accessory protections of portcullis, etc., as usual, and shut off entirely from all other parts of the general plan by means of a smaller encircling wall, as indicated above, between which and the tower itself lay a moat slightly over twenty-five feet in width and about sixteen feet beneath the sill of the narrow entrance. The usual drawbridge was thrown across the moat to connect with the open courtyard. From a narrow entry, or postern, a short corridor or passage leads through the wall of immense thickness—that is, one fourth of the total diameter of the tower, or a matter of about twenty-five feet of masonry as measured above its slanting or battered base—and in the thickness of this

wall were contrived towards the right a spiral stair-tower, or rather stair-well, which served all upper levels of the structure, and towards the left a short passage leading to conveniences, thus placing the latter entirely out of direct communication with the central open space for purposes of sanitation.

A well driven to a depth of one hundred and ten feet was located at the right immediately on entering the great vaulted room forming the ground story of the donjon, occupying one of twelve rectangular recesses in the thickness of the wall (see ground plan), all of which are of equal size, excepting that occupied by the well and that required for the entrance. These twelve niches, oblong in plan, correspond to as many vaulting compartments, the strongly projecting ribs of the radial vault



COUCY-LE-CHÂTEAU: PLANS OF DONJON, OR KEEP.



Plate III.

THE DONJON OR KEEP, COUCY-LE-CHÂTEAU.

From a Water-colour Drawing by the late R. Phené Spiers.

June 1918.

22

striking against an annular oculus above and forming a series of deep penetrations, in the full height of which the square-backed niches were carried up in a double tier, the upper level being formed by the level of a cornice above a series of pointed arches. The great vaulting ribs spring from small shafts with finely cut capitals set against the wall-spurs projecting between the niches just mentioned. The only other source of light is found in two small square windows set very high.

In the first story (see p. 116) we have practically a duplicate of the ground-plan. There is provision for meagre lighting in this case, however, in the form of three small windows. There are again twelve oblong niches, three occupied by narrowing passages leading to the windows, one giving upon a very narrow passage connecting with a small bridge thrown across to the enclosing curtain wall, a fourth giving access to the circular stairway, and a fifth occupied by a fireplace with chimney (see section below), the latter not by any means the customary thing at this stage in architectural history. The vaulting ribs in this case again strike against a circular opening in the crown, the purpose of such openings being to provide an easy means of carrying supplies from floor to floor, especially missiles to the roof, since a vertical hoist could easily be contrived to serve all three levels.

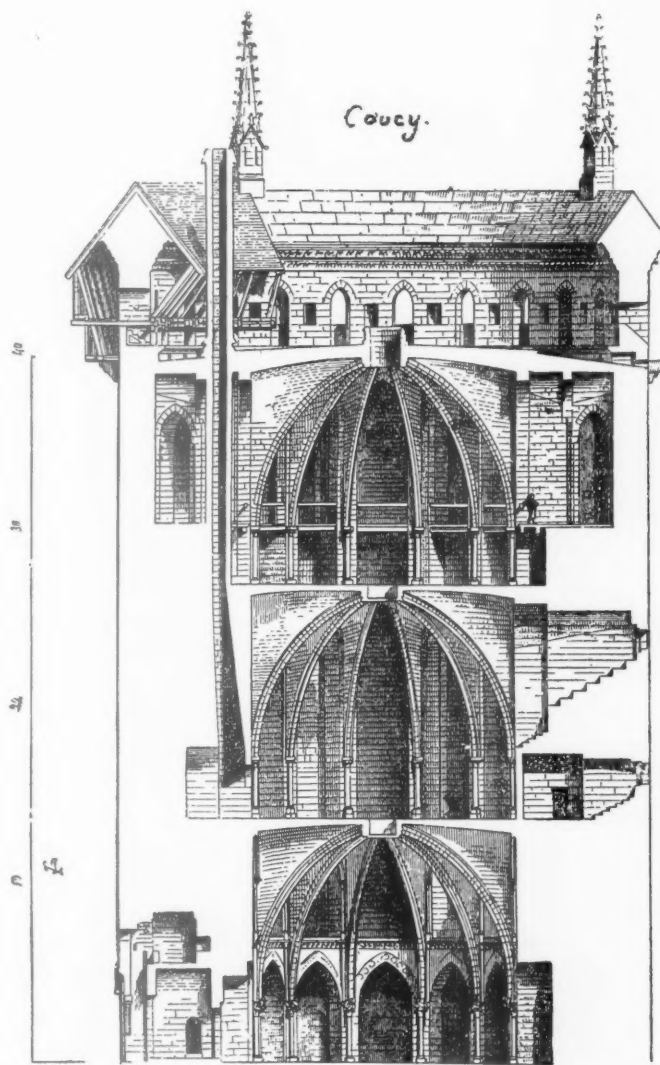
In the second story interior (see plan, p. 116) we have a splendid example of mediæval design, a conception of almost terrible dignity, and as good an illustration of the decorative treatment of distinctly military buildings as can anywhere be found in feudal times. The great hall, a twelve-sided polygon in plan, is vaulted radially, the ribs again springing from carved capitals set on slender shafts, the latter placed against deep piers disposed on the radii of the dodecagon of the plan, but each pier is pierced at the main floor level and also at the level of the gallery raised about ten feet above it. By this means large accommodations were afforded, and it has been estimated that as many as a thousand retainers could be grouped together in this hall and its galleries, so that all might hear simultaneously some general pronouncement as to law or mutual defence of the castle. At this level the wall has been decreased in thickness about two-thirds, and in the space thus gained deep recesses give additional floor area. Since the chief source of light was the central opening in the roof, only two windows were built into this story. The stair-well was itself lighted by slit windows throughout its height.

The roof (see plan, p. 116) of the donjon served, as was the case in all similar constructions, as a sort of fighting-top. The roof proper was lead-covered and the wall of the tower was carried up to a considerable height beyond its level. This wall space was perforated by slit windows alternating with larger openings with pointed heads; although of the size of doors, these were filled in through half their thickness to such height as to make them appear as windows from without. By this means defenders placed in them could operate at freedom and without interference from the activity of those furnishing supplies and missiles on the roof area. On the exterior wall at the roof level were built a number of brackets in stone; these served as supports for an additional wooden gallery (see section opposite), which, projecting from the wall face, could command a full view of the base of the tower without exposing the defenders. Between the stone brackets supporting this wooden gallery were left a series of openings to assist in the construction of the gallery, as sockets for beams, and also to serve as convenient points from which to drop missiles.

The heavy wall or battlement terminated in a cornice, projecting both inward and outward, and covered with a gable roof. Four pinnacles, with finials and crockets, lent a gratifying decorative touch to the heavy exterior.

To visualize the effectiveness of the donjon in its pristine structural integrity, it will be necessary to restore also the interior decorations, carried out in fresco on a thin coat of plaster which covered masonry walls left quite rough in expectation of such covering and painting. We must also visualize the paintings of chivalric scenes to serve not only as reminders of the glory of the owner's crest, but also as a means of impregnating the minds of youths and squires with an adequate sense of the importance of certain military and other feudal virtues. Add to this the glint and rattle of armour and the fine colour and movement of loose garments of women, and restore heavy hangings and crude oaken furniture, and we have but a very dim picture of such quality and grandeur as was not attained in any other castle in France. It is not at all difficult to understand the source of inspiration from which the Romanticist draws so continuously and with such gratifying results when we recall but a small fraction of the charm of Coucy.

Note.—Except for the drawing by the late Mr. Phené Spiers, all the illustrations accompanying this article are from Viollet le Duc's *Dictionnaire de l'Architecture*.



SECTION OF DONJON OR KEEP.

DAVID ROBERTS'S SPANISH DRAWINGS.

By ALBERT F. CALVERT.

(Concluded from p. 92, No. 258.)

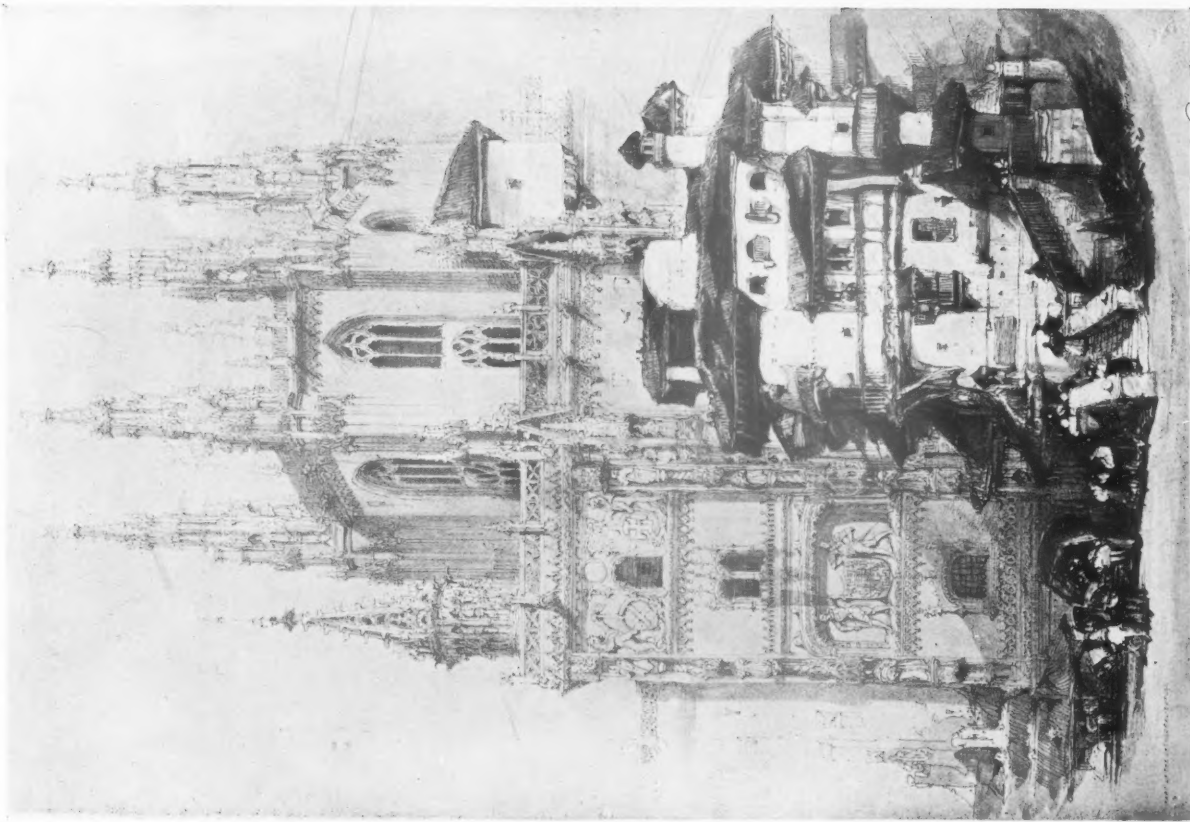
THE portion of the Cathedral of Burgos here represented (Plate IV) will convey some idea of the vast extent of the pure Gothic edifice of the thirteenth century which was once the Metropolitan church of the most ancient capital of the Spanish kings. Its picturesqueness is enhanced by the fact that the cathedral is built on very uneven ground; but the extreme plainness and severity of the lowest stage of the western or main front contrasts incongruously with the more ancient and elaborate work above. Formerly rich in sculpture, this part of the façade was rebuilt in the latter part of the eighteenth century, when, in accordance with the pseudo-classical ideals of the period, it was robbed of nearly all its statuary. The towers, which are surmounted with steeples rising to a height of 300 ft., are detached from the rest of the edifice except at the lowest story, and are adorned with tall pointed windows. These pinnacles are wonderful examples of delicate fretted stonework. The plan of the cathedral—a Latin cross, with nave, aisles, and transept—has been obscured by the eight chapels built on the north, south, and east sides. The nave, which is of six bays, is 58 metres in length. Though the interior is spoilt, as in the majority of Spanish churches, by the choir, it remains picturesque, pure, and devotional in the highest degree. The dim religious light of the northern churches in the Peninsula is lacking, for the interior is white throughout, the stained glass which in earlier times mellowed the strong sunlight having been shattered during the War of Independence; but the effect of the light which floods the high clustering columns renders deeply impressive this proud remaining monument of Gothic taste. The triforium is somewhat in the nature of an architectural curiosity, consisting as it does of wide bays of five or six lights each, with trefoil and quatrefoil traceries above, enclosed within a semi-circular arch or "label," decorated with sculptured heads. This has certainly undergone some alterations since the thirteenth century, and Street, who declares he has seen nothing like it elsewhere, supposes it to be the work of a native.

In point of wealth Xeres de la Frontera, or Jerez, in Southern Andalusia, is the third city of Spain; its sherry is known all over the world, and its bodegas, or wine-cellars, are the wonder of the ordinary tourist; but to the artist and archaeologist its one attraction is its noble Church of San Jago. This is still one of the most beautiful of those Gothic structures which have survived to dazzle the eye with the elaborate richness of its ornament. Erected in the last quarter of the fifteenth century and onwards, the fine western façade with its wonderful columns has been masked by a more modern Græco-Roman front. The side portals are still Gothic, and the building is surmounted by a handsome tower, the upper part of which is embellished with azulejos. The nave and aisles are divided by bold pillars. The elaborately ornamented transept has served Roberts as the subject for a picture (Plate IV). The stained-glass windows are set in the richest Gothic tracery. The reliefs within the presbytery representing the Nativity, Adoration, Annunciation, and Transfiguration were executed by Montañes in 1652. The sgraffito contains folding-doors by Berreguete, and a Christ by Montañes. The Church of San Jago has been restored at great expense,

and much of the stone carving is excellent; but its exterior symmetry and noble proportions have been obscured by the juxtaposition of the meaner buildings that have grown up around it, and neglect has marred the beauty of a monument which commemorated the triumph of Catholicism in the days of religious chivalry and the Church militant.

The view of Cordova as one approaches it across the massive Moorish bridge which spans the broad, treeless, somnolent Guadalquivir, is dominated by the Moslem temple which was once deemed one of the greatest marvels of architecture in the world (Plate V). After St. Peter's in Rome, it is the largest of Christian temples; but whereas to-day the building only measures 394 ft. by 360 ft., in the tenth century it had a length of 742 ft. and a breadth of 472 ft. It was encompassed by battlemented walls, surmounted by forty-eight watch-towers; ivory, jasper, porphyry, gold and silver, and precious stones were lavishly employed in its decorations; its panels of scented woods were fastened with nails of pure gold; and its red marble columns were believed to be the work of Allah. As a Mohammedan temple it ranked in sanctity with the Mosque of Omar at Jerusalem, immediately after Mecca, which it was designed to eclipse. Its interior to Occidental eyes is fantastic and fascinating rather than beautiful. Its endless series of parallel aisles spanned by low horseshoe arches has been compared to a forest of marble, and it has been described as a gigantic crypt. Over a thousand columns once rose from its marble floor, and from its roof once hung 280 chandeliers with 7,425 lamps. "The gold shines from the ceiling like fire," wrote one of the Arabic writers, "it blazes like the lightning when it darts across the clouds." When Cordova was taken by St. Ferdinand in 1236, the mosque was consecrated as a Christian cathedral, but little alteration was made in the original structure. In 1523, when the Bishop of Cordova proposed to build a church in the centre of the temple, the Cordovans threatened the innovators with death; but Charles V issued a decree, and the bishop triumphed. Two hundred columns were swept away to make room for the existing chancel, choir, and lateral chapels. The Bishop's Palace beside the Cathedral was erected in 1745.

The clean white town of Carmona, lying between Cordova and Seville (Plate V), on the extremity of a ridge commanding the plains on both sides, is inviting by its picturesqueness. Cæsar made Carmona the strongest city in the province; it was betrayed by the Goths to the Moors, and was recovered in 1247 by St. Ferdinand, whose standard is borne every anniversary to the Hermitage of San Mateo, of which he was the founder. The massive Moorish gate leading to Cordova is built on Roman foundations, with an Herrera elevation of Doric and Ionic, and towering above it is the superb ruin of the Alcazar. The tower of San Pedro is an imitation of the Giralda of Seville, and a small Moorish court is attached to the late Gothic church of Santa Maria, while the gateway on the Seville side is also Moorish. The towers of the Alcazar command a magnificent view of the whole plain of Andalusia, bounded by the Sierras of Ronda and Granada; but the great square is the peculiarly characteristic feature of the town, and artists who would see it in all its flashing and vivacious prettiness should visit it on the 25th of April, the day of its annual fair.



Part of the Cathedral, Burgos.

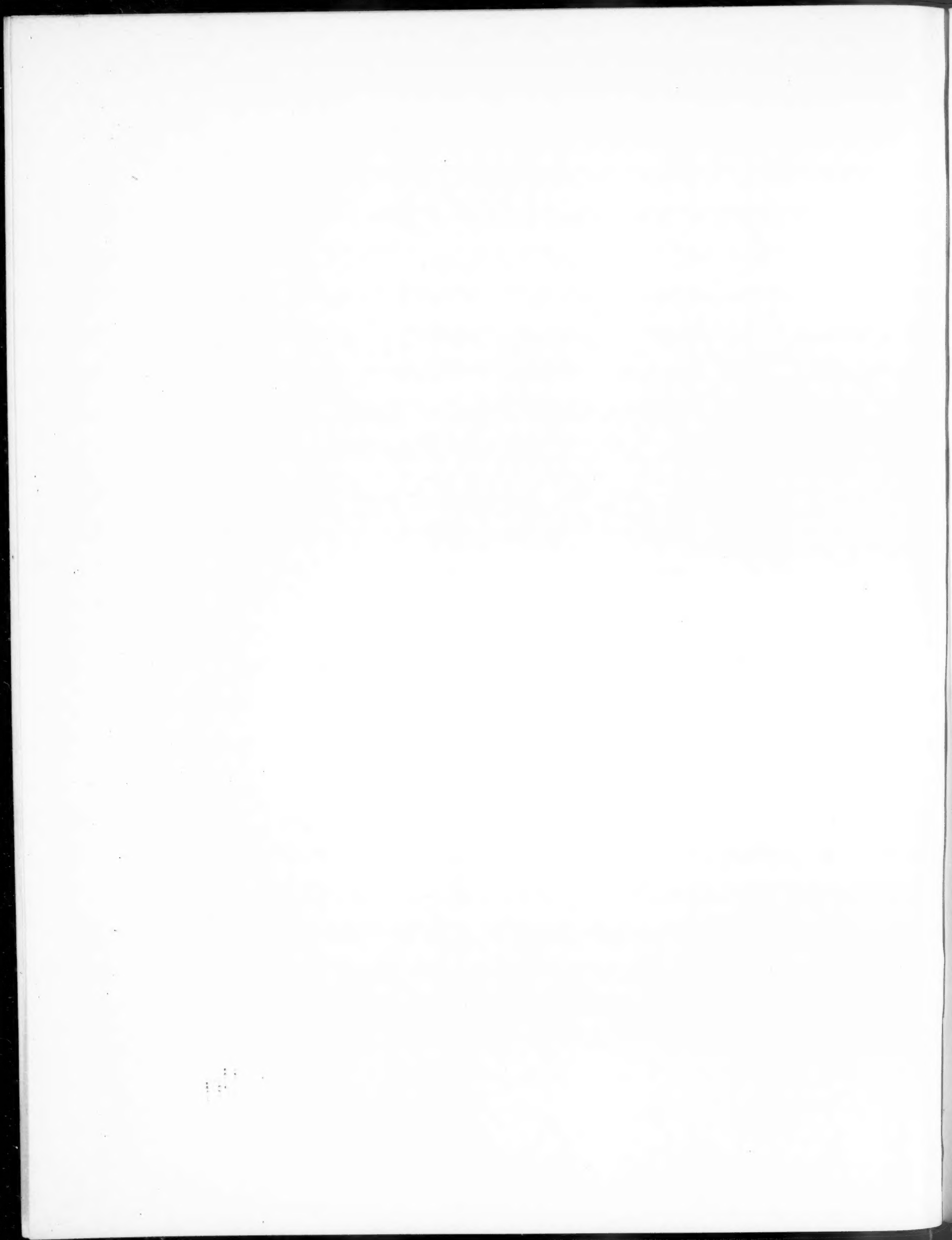
Plate IV.



Church of San Jago, Xeres.

June 1918.

TWO STUDIES OF SPANISH GOTHIC.
From the Lithographs by David Roberts, R.A.





Grand Mosque and Palace of the Archbishop, Cordova.



Market Place, Carmona.

Plate V.

VIEWS OF CORDOVA AND CARMONA, SPAIN.

From the Lithographs by David Roberts, R.A.

June 1918.

100

"HOMES OF REST": ALMSHOUSES AS WAR MEMORIALS.—II.

By MERVYN E. MACARTNEY, B.A., F.S.A.

(Continued from p. 125, No. 253.)

SINCE the first article on this subject appeared there has been much discussion as to how our repatriated heroes are to be treated. So many are the suggestions and so divergent the aims of some enthusiasts that one feels alarmed lest, from the variety of schemes, the stream of the nation's benevolent energy should be dissipated into too many channels.

Not only in Great Britain but in France and the United States the aftercare of the disbanded soldiers and their dependents is occupying more and more of the thoughts of wise and farseeing men and women. So vast is the vision presented that few can picture the scene with any sense of reality. Take the numbers of officers: the figures are close upon a quarter of a million. We may regard many of these as married men. How many can count on obtaining work that would support them and their families? There must be centres for teaching them trades and professions. The experience that they have gained in the War, though very valuable, is of little use commercially.

The French have called this future "Re-education." It must be co-ordinated on business lines; therefore, besides homes for the disabled, there must be educational establishments, like the colleges at Oxford and Cambridge, for instructing those anxious to learn a means of livelihood. There is no doubt that the prevision of men like Lords Armstrong, Kelvin, Palmer, and many others, has been the means of saving this country from ruin. Had it not been for the colleges and universities founded and encouraged by these men

our plight in this mechanical war would have been sore indeed. Most of the students at these seats of learning have been so far young unmarried men. We must evolve some scheme whereby the married man can fit himself for the battle of life.

No nobler aim can be imagined than that of founding a community for this purpose. It might be somewhat of a family gathering. The women mean to take a far larger share in the production of the wealth, not only of the nation collectively, but of the home circle individually. They will see, too, that their girls occupy their time in remunerative work. The tambour frame and guitar are things of the past. The trend of public opinion has long been in the direction of diverting eleemosynary benefactions towards education. The funds of Durham See have been largely allocated to Armstrong College, Newcastle.

The plea for building Homes of Rest is urged as corollary to this. It is all part and parcel of the reconstruction of social life after the War. But instead of carrying out buildings as barracks or factories, let us take counsel together to see if something better cannot be devised, and, by examining the examples of which there are scores in the country, hit on some plan whereby we may be able to help our repatriated warriors, advance the welfare of their families, and at the same time embellish the country. With this object in view we publish some well-known examples of Homes of Rest. Some of these are for pensioners of the Army as well as of the Navy. It would advance the cause if it were possible to find the right



ALMSHOUSES, MAIDENHEAD, BERKS.



ALMSHOUSES, MAIDENHEAD, BERKS: DETAIL OF ENTRANCE.

word to fit the object aimed at. "Homes of Rest" does not exactly fill the bill. What is wanted is some descriptive title that would embrace the two objects aimed at—residential buildings for officers with pay that does not suffice to keep them in their proper status, together with opportunities for adding to their income by means of farming (fruit, poultry, or agriculture); and, in addition, educational centres for men bent on learning scientific and mechanical trades and teaching their families to be self-supporting. It has been hitherto the custom in both the United States and Germany that every man and woman, of whatever degree in life, must learn a trade sufficiently well to be able to earn a living at it should the necessity ever arise.

The man who has had three or four, and maybe more, years of the stress and shock of war, will in many cases require at least a year, if not more, of almost indolence to recover his mental and physical balance. To him the solace of a rural home and quietude of green pastures would be of inestimable benefit. Unless we build hostels there will be no proper place for these war-scarred men to find a refuge from carking care and the memory of the grim scenes they have witnessed, the losses of possessions, friends, and nerve. Unless some of these can be made good to them how can they battle with the world, ever the novercal and not true mother towards those who are a bit down on their luck?

ALMSHOUSES AT MAIDENHEAD.

The two photographs of the almshouses at Maidenhead are fairly representative of that class of building to be found all over England, but more frequently in the counties of Bucks, Berks, and Oxon. The neighbouring Jesus Hospital at Bray was well chosen by Fred Walker for his "Haven of Rest." A full description accompanies the first article on this subject.

FISHERMEN'S HOMES, YARMOUTH.

The Fishermen's Homes at Yarmouth form a most picturesque and attractive group. To build low-storied blocks cannot be expensive. For the infirm, an absence of steps is a great blessing which only those getting on in years can really appreciate.

COLLIN'S HOSPITAL, NOTTINGHAM.

Collin's Hospital, Nottingham, is an interesting example of eighteenth-century work, though the name of the architect is not known. The story of its inception is related in a brief inscription over the north entrance, which reads as follows:—

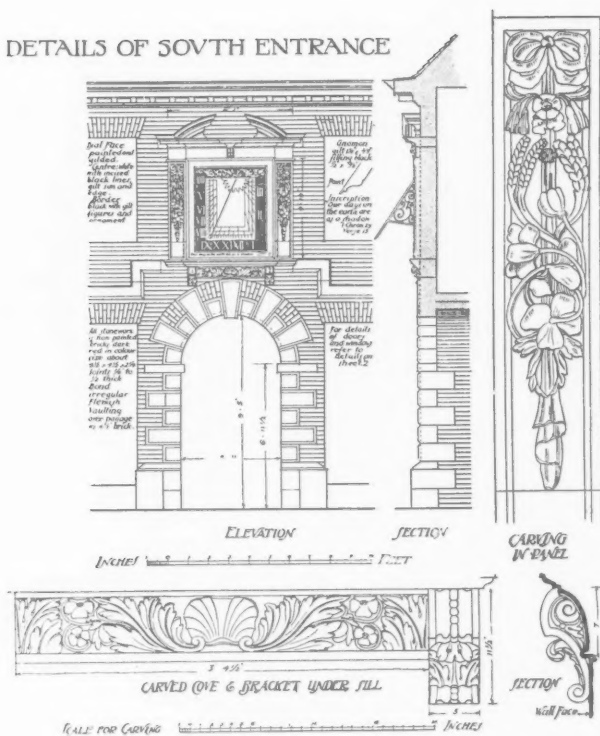
"This Hospital, by the appointment of Abel Collin, late of Nottingham, Mercer, deceased, who in his life was of an extensive Charitie to the Poor of all Societies, and at his death, by his last Will and Testament, left a competent Estate for erecting and endowing the same, was by his Nephew and Executor, Thomas Smith, begun and finished in the year 1709. ΑΙΙΘΑΝΩΝ ΕΤΙ ΑΑΑΕΙΤΑΙ."

The hospital was founded originally for the reception of twenty-four poor men and women, each of whom was provided with two comfortable apartments, and two shillings per week, with a ton and a half of coals per annum. The general dimensions of north and south entrances correspond. A photographic view of the former, and a measured drawing of the latter, are given on the opposite page, together with general plans, sections, and elevations.



FISHERMEN'S HOMES, YARMOUTH.

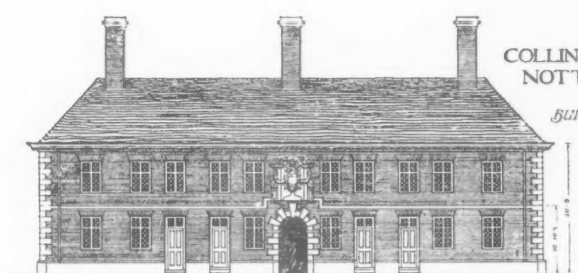
DETAILS OF SOUTH ENTRANCE



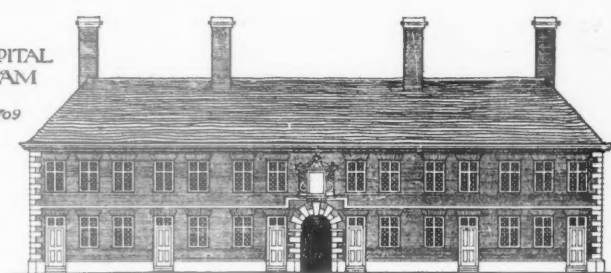
Detail of South Entrance.



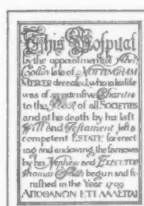
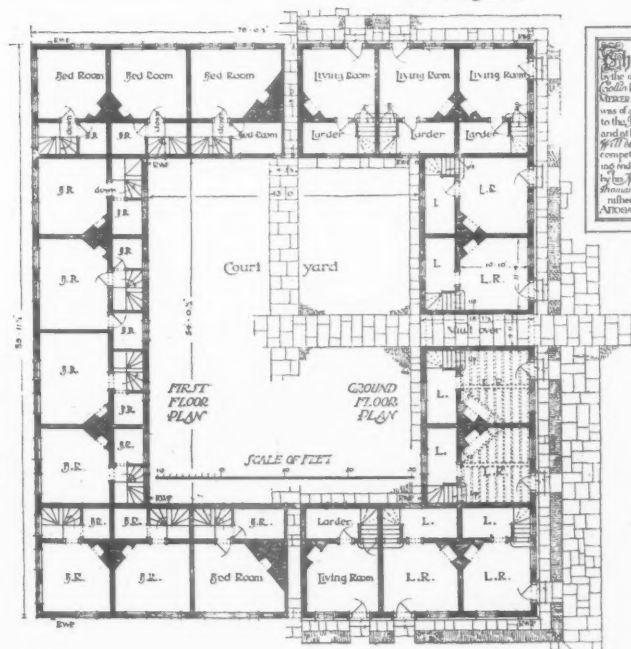
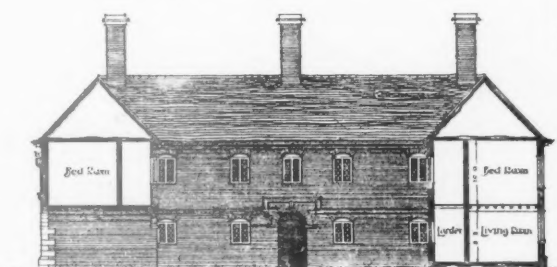
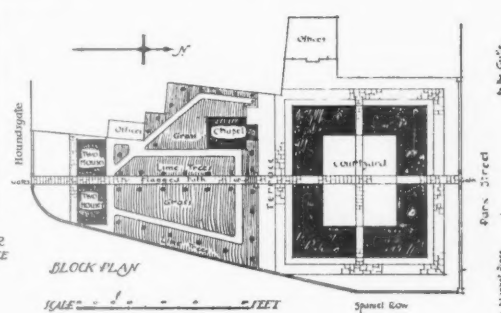
Detail of North Entrance.



EAST ELEVATION

COLLIN'S HOSPITAL
NOTTINGHAM
BUILT AD 1709

NORTH ELEVATION

INSCRIPTION OVER
NORTH ENTRANCE

Measured and drawn by W. B. Colthurst, AD 1891.

COLLIN'S HOSPITAL, NOTTINGHAM: PLANS, SECTIONS, AND ELEVATIONS.

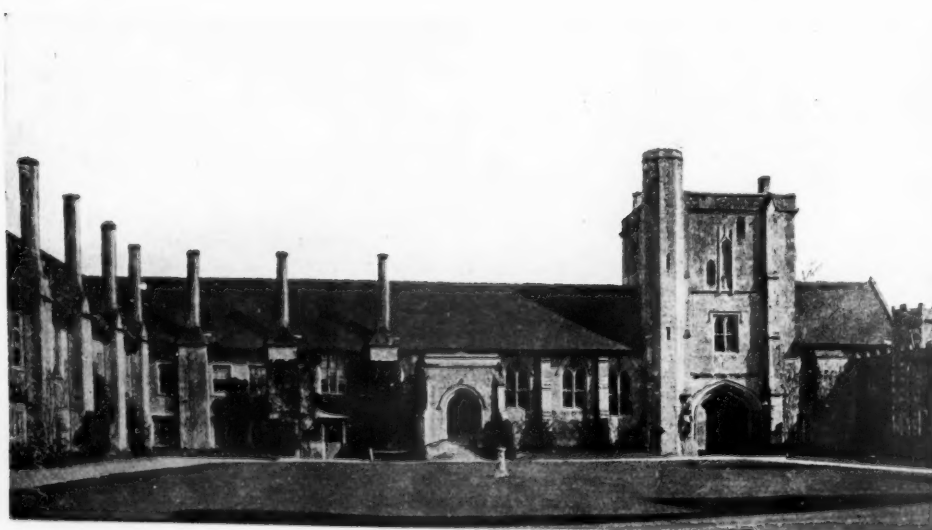
Measured and drawn by W. B. Colthurst.



THE CHURCH OF ST. CROSS, WINCHESTER: VIEW FROM THE NORTH-WEST, AND AMBULATORY.



THE CHURCH OF ST. CROSS, WINCHESTER: AMBULATORY AND BEAUFORT TOWER.



ST. CROSS HOSPITAL, WINCHESTER.

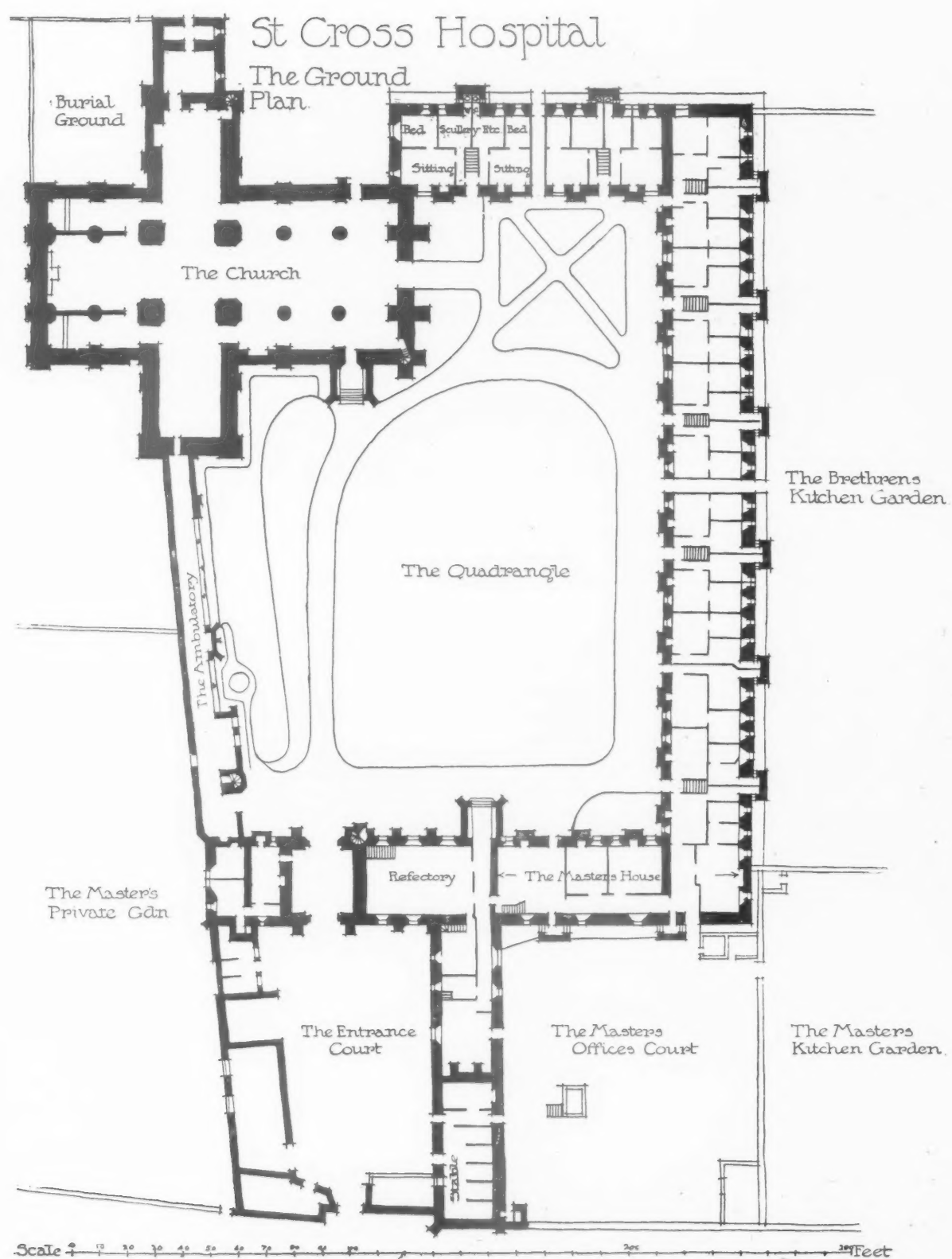
ST. CROSS HOSPITAL.

There are few charitable foundations so well known as that of St. Cross. Originally founded by Henry de Blois, Bishop of Winchester, as a hospital for "poor men decayed and past their strength," it was increased by the addition of "The Almshouse of Noble Poverty," established by Cardinal Beaufort. This building was pulled down in 1789. The sketch-plan accompanying this article will make plain the arrangement of these buildings. As you approach from the north you enter the forecourt through a gateway. Facing you is the Beaufort Tower, with the hundred men's hall or refectory on the left and kitchen on the right. Passing through the Beaufort Gateway you find yourself in one of the most agreeable quadrangles to be found anywhere. It reminds one of some Oxford or Cambridge college—Magdalene, for instance, where the chapel dominates the area as Wykeham Tower does at Oxford, though of such different periods of architecture. The ambulatory on the left connects the gateway with the chapel or church. It is very charming with the bay window half-way. On the right are the refectory and Master's house, the other two sides forming the brethren's dormitories, a miniature flat consisting of sitting-room, bedroom, scullery, and entrance passage.

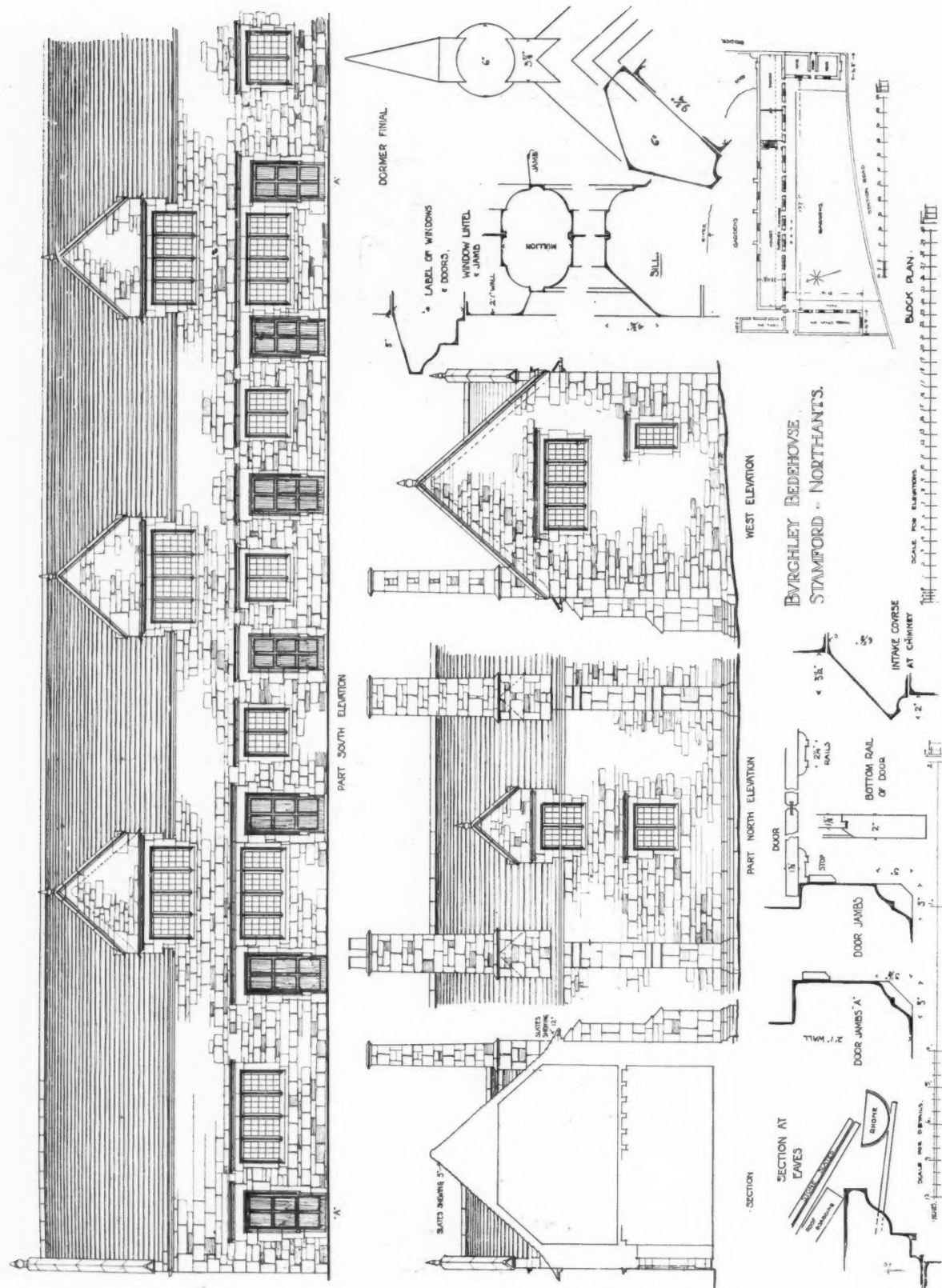
There were great disputes between the Bishop of Winchester, the Knights of St. John of Jerusalem, and the Crown. Finally, the mastership fell into the hands of the Bishop of Guildford, but his maladministration caused such a scandal that a new board was appointed consisting of Master or Warden and thirteen brethren under direction of twelve trustees.

Anthony Trollope's novel of "The Warden" in the Barchester Series is founded on St. Cross, and his clever description of the institution and inmates gives a clearer picture of the state of affairs sixty or seventy years ago than any history.

Most people have heard of the "Wayfarer's Dole." This consists of a tankard of beer and a hunk of bread to anyone who asks at the porter's lodge (till the two gallons of beer and two loaves provided by the charity are exhausted). The church is one of the most interesting in England, but has suffered much at the hands of architects who should have known better. In the churchyard there is a quaint epitaph to a "Grenadier in the North Regt. of Hants Militia,



THE HOSPITAL OF ST. CROSS, WINCHESTER: PLAN OF GENERAL LAY-OUT.





BURGHLEY BEDEHOUSE, STAMFORD, NORTHANTS: GENERAL VIEW OF EXTERIOR.

who died of a violent Fever contracted by drinking Small Beer when hot the 12th of May, 1764. Aged 26 years." Then follow two sets of doggerel:—

Here sleeps in peace a Hampshire Grenadier,
Who caught his death by drinking cold small Beer.
Soldiers be wise from his untimely fall,
And when ye're hot drink Strong, or none at all.

Officers who restored the memorial in 1781 added this grace:—

An honest Soldier never is forgot,
Whether he die by Musket or by Pot.

The "Brethren of Noble Poverty" of the St. Cross Hospital have a very pretty taste in flowers, and in due season the quadrangle is a glorious blaze of colour and a fount of fragrance. Because the flowers are mostly old-world varieties that have gone out of fashion elsewhere, they are therefore the more appropriate to their ancient environment, and the better qualified to evoke the tender memories that harmonize with the spirit of peace of which St. Cross seems the chosen abode and the supreme expression. Clearly these flowers are the darlings of the brethren who tend them: to whom they must seem, like the children who brighten the services at the church, symbols of an unceasing resurrection of life and growth and beauty.

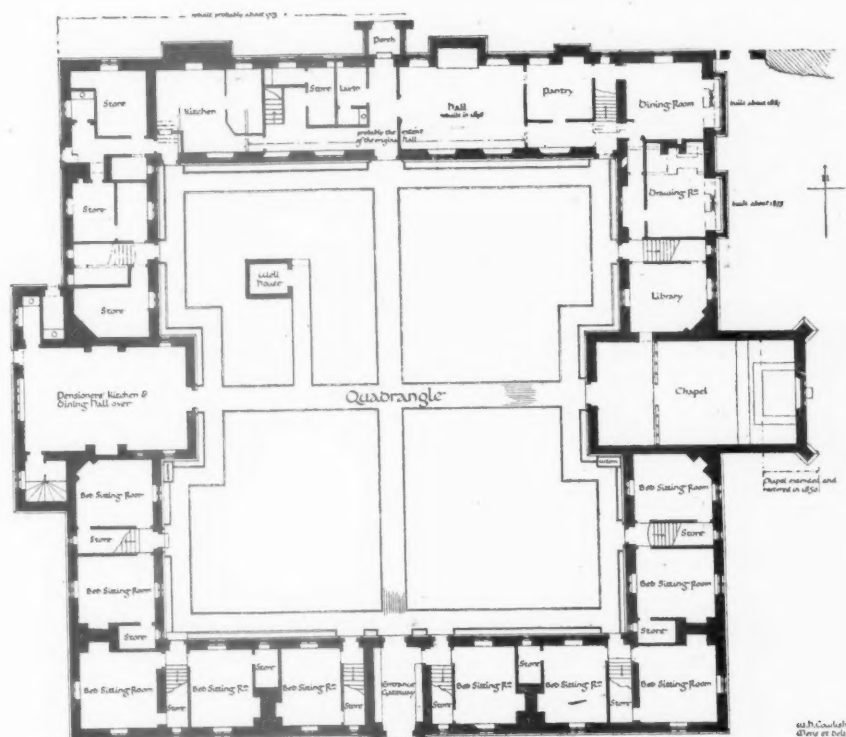
BURGHLEY BEDEHOUSE, STAMFORD.

Lord Burghley built his Bedehouse at Stamford in 1597, when vernacular tradition was strong. Hence this admirable little building, with its simple and straightforward style, and its quite exemplary masonry, is a valuable survival of the late sixteenth century, and there is little more to say about it than what is sufficiently expressed in the illustration.

SACKVILLE COLLEGE, EAST GRINSTEAD.

Sackville College stands on the highest ground in the small town of East Grinstead, partly hidden from the public gaze by the houses in the main road running west to Tunbridge Wells. The approach is up a slanting path on the south side through a porch of local stone, weathered to charming grey by exposure to sun and rain. Two massive brick chimneys stand sentinel on either side of the gable over the porch. Two other gables mark each end of the façade, making a symmetrical and harmonious elevation that is most satisfactory, but without any striving to be pretty or novel. Passing through the porch, one finds oneself in a quadrangle that might be in Oxford or Cambridge. Mr. Butterfield has treated this building with more care and reverence than St. Cross. On the east side are the chapel and the Warden's private garden, trim and formal, with the ground sloping abruptly to the south-east, with Brambletye House in the mid-distance and Ashdown Forest in the distance. In such happy places have the lines of the brethren and sisters fallen, watched over by a Warden and two assistants. Such a building on a similar site would surely save the health and sanity of many a stricken soldier of this ruthless war.

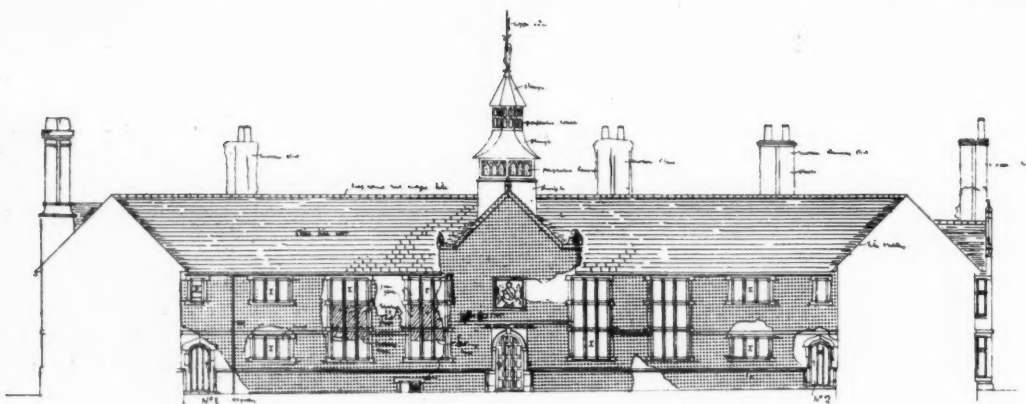
(To be concluded.)



Ground Floor Plan.

SACKVILLE COLLEGE, EAST GRINSTEAD: PLAN.

Measured and drawn by W. H. Cowlshaw.



S. Elevation in Quad.



S. Elevation



E. Elevation

Scale 1" = 10' 0"



E. Elevation in Quad

Note.—Stippling indicates creeper.

SACKVILLE COLLEGE, EAST GRINSTEAD: ELEVATIONS AND SECTIONS.

Measured and drawn by W. H. Cowlishaw.

THE EDITH CAVELL HOME FOR NURSES.

THIS building, erected at the London Hospital, White-chapel, derives additional interest from the fact that Her Majesty Queen Alexandra, the President of the Hospital, has graciously desired Lord Knutsford, the Chairman of the Hospital, to call it "The Edith Cavell Home," instead of the name originally intended, viz., "The Alexandra Home."

The building has a frontage of about 130 ft. to East Mount Street, with a return frontage of 47 ft. to Oxford Street, facing the Lückes Nursing Home. It consists of eight floors, including the basement, and has accommodation in separate rooms for 110 nurses, 12 sisters, and 12 servants. The basement, which has wide areas all round and is well lighted, contains the heating chamber, the accumulator room, the coal-cellars, servants' rooms, together with a servants' sitting-room, scullery, linen store, larders, bathrooms, and lavatory block detached.

The ground floor contains, in addition to the sisters' and nurses' rooms, a sitting-room and library for nurses, visitors' room, three bathrooms, and tea-room. The upper floors consist entirely of sisters' and nurses' bedrooms. Each is provided with a fitted wardrobe, similar to the other nurses' rooms in the hospital. Each floor is provided with a hair-washing room, fitted with a special electric blower for the use of nurses in quickly cleansing and drying the hair, as in the older parts of the hospital. Each floor is also provided with a central staircase and large electric lift, also with a boot-room, three bathrooms, and a detached lavatory block. There are also additional escape staircases at each end of the building. The attic floor is used as a boxroom; but it also contains separate iron lockers for the use of nurses.

The building generally is constructed of non-combustible materials, the floors being composed of concrete carried by steel joists. The inside staircases are constructed of reinforced concrete covered with terrazzo mosaic. The home is warmed throughout with hot-water radiators, with coal stoves in the sitting-rooms,

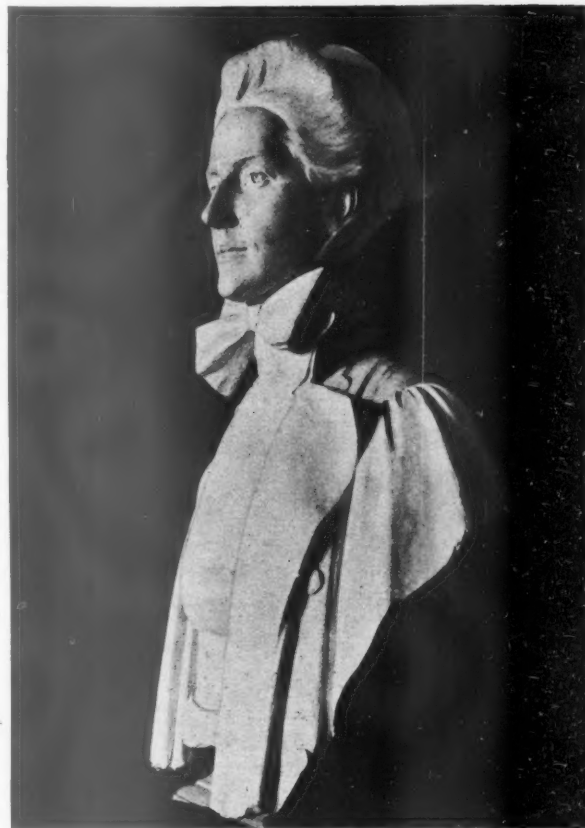


Photo: Sport and General.

BUST OF THE LATE NURSE CAVELL.

Sir George Frampton, R.A., Sculptor.

and is lighted by electricity. The room floors are covered with linoleum on a prepared cement surface; the large sitting-room and library is floored in oak.

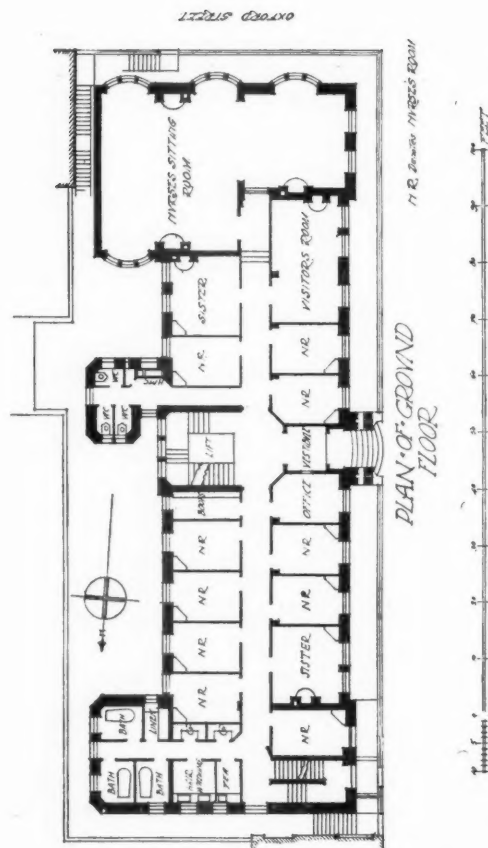
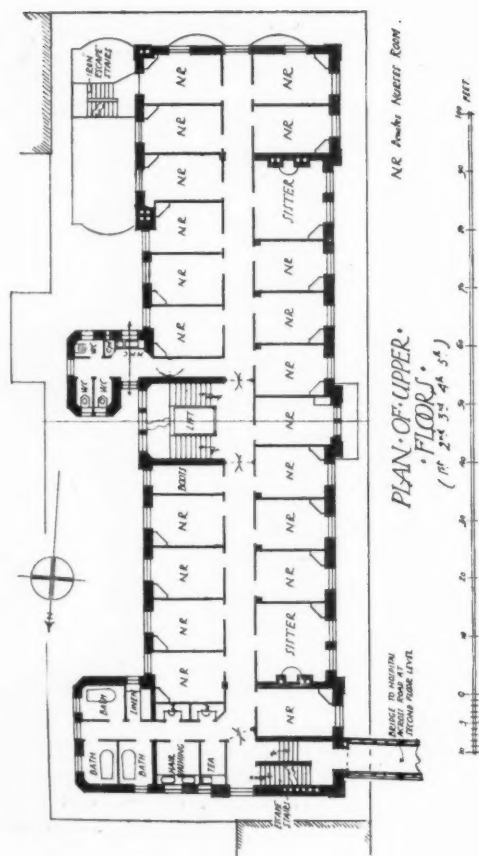
The building was designed by Messrs. Rowland Plumbe, F.R.I.B.A., and Partners, architects, and was carried out by Messrs. Perry & Co., Ltd., contractors, of London. Messrs. Bratt, Colbran & Co., of London, supplied and fixed the following: Fumed and waxed polished oak wardrobes to the architects' special design, in the sisters' and nurses' bedrooms throughout (136 in all); "Heaped" Fire fireplaces throughout, with oak mantels—the three large fireplaces in the sitting-room, ground floor, being to the architects' design, and arranged with seat fenders; also the fire implements throughout. Among the many other sub-contractors concerned with the work were the following:— Messrs. Waygood-Otis, Ltd. (one bed lift, automatic push button control, to raise 15 cwt. at a speed of 120 ft. per minute); Messrs. Mellows & Co. (glazing); Messrs. Haywards, Ltd. (pavement lights); Messrs. Hobbs, Hart & Co. (locks).



Photo: Sport and General.

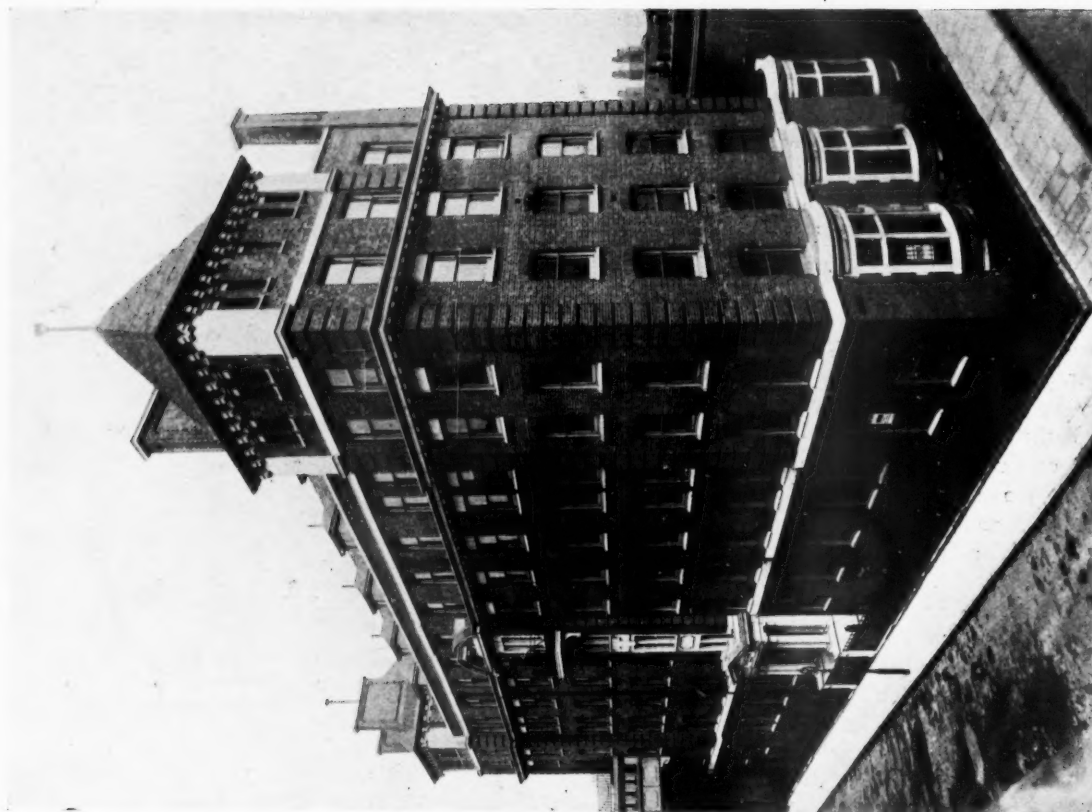
THE EDITH CAVELL HOME, LONDON HOSPITAL: NURSES' SITTING-ROOM.

Rowland Plumbe, F.R.I.B.A., and Partners, Architects.



THE EDITH CAVELL HOME, LONDON HOSPITAL.
Rowland Plumbe, F.R.I.B.A., and Partners, Architects.

Photo: Sport and General.



A Notable Installation.



The accompanying illustration shows the battery of Ideal Boilers in the City of Leeds Training College (the centre building in the bird's-eye view), which is also fitted with an Ideal Domestic Boiler for Hot-water Supply and with Ideal Radiators. The Hostels at each side and the Principal's Residence are also warmed by Ideal Radiators and Ideal Boilers, while the water for the Swimming Bath in the building at the rear is heated by two No. 3 F-13 Boilers.

IDEAL & IDEAL
RADIATORS & BOILERS

Ideal "F" and "G" Series Boilers are very compact and suitable for shallow stokeholes; they are highly efficient, simple to erect and operate, fitted with water-cooled grate, and can be supplied with insulated steel jacket covering all exposed surfaces.

Write or call for further particulars. Inspection of our Showrooms invited.

NATIONAL RADIATOR COMPANY
LIMITED.

Offices, Showrooms & Works: HULL, Yorks.
Telephone No.: CENTRAL 4220. Telegrams: "RADIATORS HULL"

London Showrooms: 439 & 441 OXFORD STREET, W.1.
Telephone No.: MAYFAIR 2153. Telegrams: "LIABLENESS LONDON"

THE Perfect System of Heating

Specially suited for:

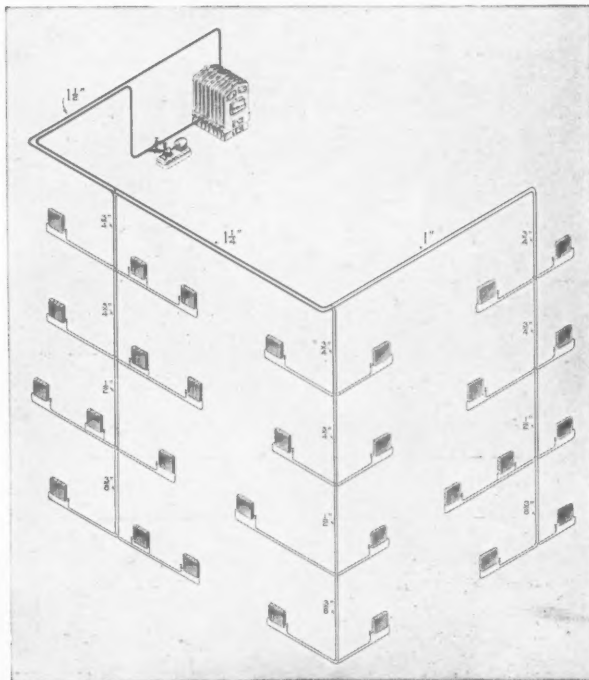
PRIVATE HOUSES,
OFFICES,
SCHOOLS,
CHURCHES,
HOSPITALS,
HOTELS,
WORKSHOPS,
&c., &c.

ECONOMY.
SIMPLICITY.
LOW COST.
PERFECT ACTION.
NO PIPE TRENCHES.
BOILER FIXED ON
ANY FLOOR.
SMALL PIPES.
PIPES RUN
IRRESPECTIVE
OF LEVELS.

Telephone:
Mayfair 6481 (2 lines).
Telegraphic Address:
"BENHAM, WESDO, LONDON."

Apply—

BENHAM & SONS, Ltd., 66, WIGMORE STREET,
LONDON, W.



RECENT INSTALLATIONS

of the "Perfect" System
Include:—

Church Missionary Society,
Salisbury Square, E.C.
Messrs. Seth Smith & Monro,
Architects.

School of Tropical Medicine
and Seamen's Hospital,
Albert Docks, E.
Messrs. A. Marshall Mackenzie &
Son, Architects.

Showrooms and Offices of
Messrs. Studebaker, Ltd.,
Gt. Portland Street, W.
H. O. Cresswell, Esq., Architect.

All Saints' Church, Goodmayes.
P. K. Allen, Esq., Architect.

New House, Lympe, for Sir
Philip Sassoon, Bart.
Messrs. Herbert Baker and Ernest
Willmott, Architects.

Gateburton Hall, Lincs., for
J. D. Sandars, Esq.
Messrs. Scorer & Gamble,
Architects.

Offices of Union Insurance
Society of Canton, Ltd.,
Shanghai.
Messrs. Palmer & Turner,
Architects.

Archibald D. Dawnay & Sons, Ltd.

Engineers and Contractors for all classes of
CONSTRUCTIONAL STEELWORK.



Example of Modern Aeroplane Factory Construction.

SHELL AND MUNITION FACTORIES FROM STOCK MATERIALS.

Up-to-date Designs prepared and submitted Free of Charge.

Stocks of all British Standard Sections in JOISTS, CHANNELS, ANGLES,
 TEES, FLATS, Etc.

London :
 STEELWORKS ROAD,
 BATTERSEA, S.W.

Telephone : BATTERSEA 1094-5-6.
 Telegrams : DAWNAY, BATT SQUARE, LONDON.

Cardiff :
 EAST MOORS.

Telephone : CARDIFF 2557.
 Telegrams : DAWNAY, CARDIFF.

KARL BITTER, SCULPTOR.

THAT Karl Bitter was an accomplished sculptor is beyond question: the examples illustrated in Mr. Ferdinand Schevill's biography of him establish the claim. That he was a great one may be disputable; but few, we think, would vote for the affirmative proposition. In fact, the man was more interesting than his works, as the biographer acknowledges in the last sentence of his book, which runs: "Of his many works the most winning and consummate, as also—if our human hopes be indeed more than such stuff as dreams are made of—the most permanent, was himself." His was one of those happy temperaments in which strength is manifested without harshness, will-power radiated rather than consciously exerted, self-confidence based on a feeling of power and a desire to exercise it blandly and benevolently. Hence he won his way wherever he went; and hence, too, he conceived of his art as mainly something to be devoted to the higher service of humanity, not as a plaything for it. There is in most of his work the unmistakable core of sincerity; and even in his gayest moments there is a hint that "life is real, life is earnest." His art was to be the handmaid of progress, to reflect and express its spirit, stimulate its aspirations, help it forward, now by a touch of allegory, now by the record of a noble deed, now by the sympathetic rendering of a fine head, face, figure.

Bitter, who was christened Karl Theodore Francis, but "cast Theodore Francis overboard as superfluous flummery," was born in Vienna on 6 December 1867, the second of a family of three boys, sons of a German from Baden who had



THE LATE KARL BITTER.

VOL. XLIII.—S

come to Vienna "with a journeyman's kit on his back." Karl's mother wanted to make him a priest, while his father was ambitious that the boy should follow the law, and Karl suggested as a compromise that he should study art. Leaving at ten years of age the elementary school for the high school, he there distinguished himself as a dunce at Latin, his explanation being that his teacher was so ugly that it hurt to look at him. Near his home there was a stoneyard, where the boy loved to watch the masons at work on tombs and shrines, and from watching he came to working, without his parents' knowledge. When they found him out they wisely accepted the situation, and entered the boy at the imperial school for applied arts, whence in due time he passed to the school of fine arts, where his inclinations towards naturalism scandalized the professors, still addicted to the pseudo-classicism of Canova and Thorwaldsen. Professors are notoriously conservative, and this set did not like the revival of naturalism which was then transforming Vienna. "The ancient town wall, which had twice withstood the assault of the Turks, was razed; the grassy moat was levelled to a broad circular boulevard, the famous Ring; and the sites of great new public buildings, such as the Parliament, the Opera House, the Art Museum, the Burgtheater, and the City Hall, were surveyed and staked off along its course. In response to so sweeping a call, Architecture came to vigorous life, and Sculpture and Painting, not to be left behind, joined their elder sister in a concerted attempt to effect a metropolitan renovation of the city." Pupils of the Academy were allowed to assist in the decoration, and among them was young Bitter, and it was in this way that he achieved his first application of art to civic service. He worked, of course, in a subordinate capacity; but the experience was valuable to him, as it stimulated in him "a decorative sense, taking account of the latent harmonies among the arts, and particularly as between sculpture and architecture"; and, further, "a feeling asserted itself that the art he followed existed less for its own sake than for the living community of men, before whom it unfolded a disinterested world of beauty, and whom it served perpetually to remind of ideals, lifting them above the cramping squabbles of the shop and market-place." His biographer ingeniously conjectures that Bitter, when on a lofty scaffold, could look down on the crowd with a certain air of detachment impossible to him who is threading his way through it and is jostled by it into a selfish regard for his own interests.

At the age of twenty, Bitter was called up for service in the army. It was then that he felt the full effect of the ugliness of his teacher of Latin. If the youth had not been put off his "construe" by the facial deformity of his preceptor, he might have obtained the certificate of proficiency entitling him to exemption from two of the three years' military service he was now required to render. He felt that three years in the army would crush the art and the heart out of him; so after a year of it he deserted, making a strategic withdrawal across the boundary into Germany, where, with immense difficulty, and with the assistance of a poor German friend who eked out the contents of a slender purse by pressing his watch upon Bitter, the deserter scraped together just sufficient money to carry him as a steerage passenger to America, where he arrived on 22 November 1889. He did not know a word of the language, and his worldly wealth was subdued to about the same modest scale.

But he had health, skill, and determination; an engaging personality—a "winning manner" being an equally valuable asset. Picture him as a beaming young fellow, well over six feet tall, slender but strong, "with a curiously mobile face, deep eyes like damped-down fires, and an abundance of dark, almost Southern hair—large hirsute and sinewy hands," seeking work by the simple process of knocking at a workshop door. He was lucky at the very first adventure, although his application was conducted in dumb crambo fashion. He showed some photographs and sketches, and the shop-boss pointed to a lump of clay in which an angel was dimly indicated. To squeeze the figure into a tympanum was the problem that had baffled the local talent. Bitter at once tackled it, and at the end of the day was told he might come again. At the end of a week's work he was given forty-eight dollars—an accession of wealth beyond his wildest dreams. He would have been much less astonished if he had been paid nothing. His first use of the money was to repay the friend who had given him the watch.

One day, while at work on "an emaciated saint," he became conscious of keen eyes watching him and smiling approval. When the stranger left, Bitter's shopmates crowded round him and tried to make him understand that he had caught the attention of the firm's most distinguished customer, Richard M. Hunt, architect, who (to cut the story short) ultimately set up young Bitter in a studio. Bitter found himself on the crest of a great wave. "The situation of American sculpture at the moment when Bitter thus auspiciously began his career was an interesting one. If the sculptural production of the United States during the first half of the nineteenth century was negligible, since the Civil War, and more particularly since the Centennial Exposition of 1876, rapid and gratifying progress had been made. By 1890 J. Q. A. Ward, the first native son fairly to emancipate himself from foreign tutelage, had done some of his best work, such as his *Pilgrim*, his *Garfield*, and his *General Thomas*; Augustus Saint-Gaudens was proudly sweeping to his zenith, and in his *Farragut* in New York and his *Lincoln* in Chicago had sounded a note of incalculable inspiration; and a whole flight of young masters, led by Daniel Chester French, Frederick MacMonnies, and Herbert Adams, had just given evidence, or else were on the point of giving evidence, that sculpture had emerged from the experimental stage and was ready to take the waters as a proud majestic craft propelled by its own power."

Bitter got his first great opportunity when the Columbian Exposition in Chicago (1893), to celebrate the four-hundredth anniversary of the discovery of America, was projected, and his friend Hunt designed the administrative building at the head of the Court of Honour, Bitter arranging the scheme of decoration. Two years before, however, he had, at the age of twenty-three, when he had been only sixteen months in America, gained the award for the most important of the three bronze gates to be erected on Broadway in accordance with a bequest by John Jacob Astor, who had specified as their subject the Expulsion from Paradise. It was the sculptor's first attempt at decorative relief work, and was frankly based on Ghiberti's design for the Baptistery at Florence. At Chicago, Bitter had work more in accordance with his bent, and revealed himself as an excellent architectural sculptor, his work there being largely functional rather than purely ornamental. It was greatly admired, and secured him a flood of commissions. He was engaged for the decoration of the Pennsylvanian Railroad Station at Philadelphia, and for that of "Biltmore," the great North Carolina mansion of G. W. Vanderbilt.

Statues, however, were the standard by which the public measured a sculptor; and, Hunt having died in 1895, Bitter did much decorative work for Geo. B. Post and Frank Furness, and had organized his studio on business-method principles, having many assistants, and "delivering the goods" at scheduled dates. For the City of Buffalo Exposition of 1901, the National Sculpture Society named Bitter as sculptor-adviser, and he aimed there at an organic composition. In 1901, busy as he was, he found time to marry and to take his bride to Europe. On his return home he resolved to abandon decoration as a business, and to pursue it as an art. He accordingly dismissed his assistants and converted his workshop to a studio. Thereafter he did statues to Henry Villard, Rebecca Foster, and Thomas Lowry, President (of the University of Michigan) Angell, the Sigel equestrian statue, and the Carl Schurz, Hubbard, and other memorials. In 1904 he was appointed director of the sculptors at the St. Louis Exposition. In 1906 he was elected president of the National Sculpture Society in succession to Daniel Chester French, held the position for two years, and was again elected to it in 1914. In 1912 he was appointed to the Municipal Art Commission of New York. In 1915 he was too busy to accept a full commission for the sculpture at the San Francisco Exposition. In that year, on 9 April, he met with his fatal accident. He and his wife, coming away from the opera in New York, were knocked down by an automobile; he was killed, but his wife survived.

Bitter was a painstaking and conscientious sculptor. He was a hard reader as well as a student of men; and whether he contemplated making an historical or an allegorical group, or a simple portrait statue of an historical person, he always made an exhaustive preliminary study of all the relevant documents. He was, indeed, a well-read man, his conviction being that the best art springs from fullness of knowledge. He had, if the truth must be told, and if the illustrations in this excellent biography are fair criteria, a rather laboured touch, his effects seeming studied rather than spontaneous. Yet his work was always noble, if a little heavy. His, however, is a most interesting biography, written in a refreshingly unconventional style.

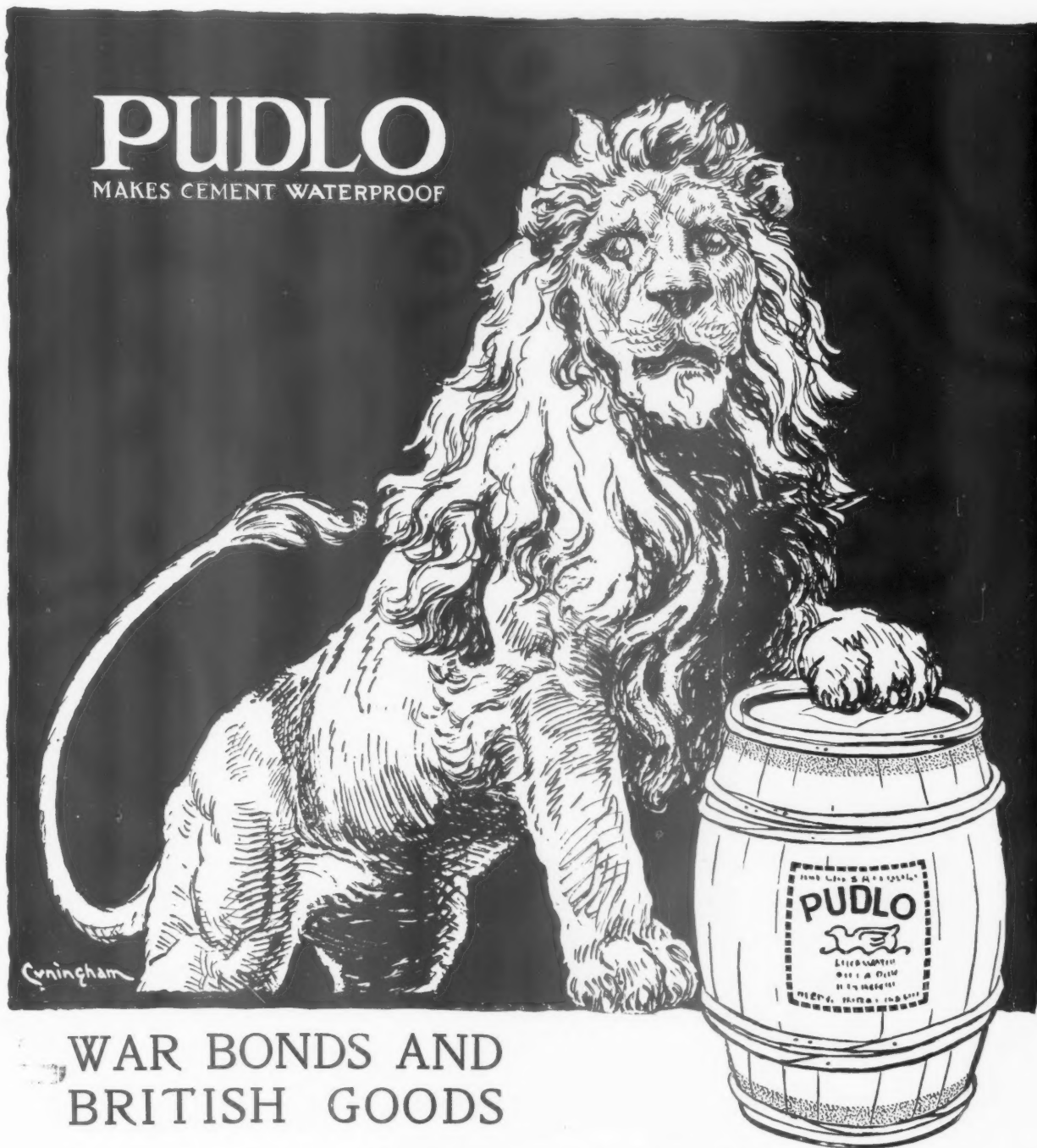
"Karl Bitter: A Biography." By Ferdinand Schevill. Issued under the auspices of the National Sculpture Society. The University of Chicago Press, Chicago, Illinois.

AN ETCHING BY HANSLIP FLETCHER

UNCOMMONLY adept in wielding pencil, pen, and brush, Mr. Hanslip Fletcher is equally dexterous with the etching-needle, as may be judged by the example of his work reproduced on the frontispiece to this issue. The subject is one of singular architectural interest—including, as it does, the "Tivoli Corner" of Soane's Bank of England, and the church of St. Margaret, Lothbury, rebuilt by Wren in 1690.

NATIONAL PAPER ECONOMY: SPECIAL NOTICE.

THE Paper Controller having forbidden "returns" of unsold copies of newspapers and periodicals, the Publishers of THE ARCHITECTURAL REVIEW desire to announce that, in order to avoid waste, they are compelled to restrict each issue to the number of copies definitely ordered. Readers in future can secure their copies in either of the following ways: (1) By placing a direct subscription with the Publishers, or (2) by ordering regularly through a newsagent. The possibility of casual purchase being eliminated, failure to adopt one or other alternative must lead inevitably to disappointment.



WAR BONDS AND BRITISH GOODS

In a recent advertisement when asking you to buy War Bonds we suggested that non-urgent Pudloed work should be left for a time.

Not because we could not fill your requirements—we always have a large stock in hand—but because the country requires your spare money.

If you must use a cement waterproofer, use Pudlo. Don't be persuaded to try a product invented by the enemies of England, nor an imported product. It would not be patriotic to use shipping by importing a substitute for Pudlo. All the ingredients in Pudlo are found and made in England.

Before using any waterproofer, ask for expert proofs that it does not affect Portland cement adversely, after a prolonged period. Ask for the Pudlo Book of Tests (free), describing the scientific tests of Kirkaldy, Faija, Cork University, the Japanese and Spanish Governments, &c.

USED FOR DAMP WALLS, FLOODED CELLARS, LEAKING TANKS, &c.

Ask for Booklet 15, which treats of economies in Cottage Building.

Used by the War Office, the Admiralty, the India Office, the G. Post Office.

BRITISH! and apart from patriotism the best! Manufactured solely by KERNER-GREENWOOD & Co., Ltd., Market Square, King's Lynn.

NOTES OF THE MONTH.

The Royal Academy Exhibition.

This year's Royal Academy Exhibition is notable as the one hundred and fiftieth of its kind, the Academy having been instituted in the year 1768, with Sir Joshua Reynolds as its first president. With regard to the exhibits, there is a slight decline on last year's numbers—1,622 as against 1,691—and one rather suspects a corresponding decline in quality; prolificacy being a manifestation of a natural force that influences quality as well as number. One's first impression of the exhibition as a whole is that it is of fair average merit, rich (as usual) in portraiture, good in landscape, rather dull and unimaginative in figure subjects. It is mainly in landscape that any indications of new tendency are to be discerned. Landscape *per se*, with hill and vale, glade and dell, tree and bush, pool and brook, as objective studies, seems to be yielding place to a mixed type of picture in which scenery is subordinated to human interest, without, however, insisting on personal incident to a degree that would constitute a "figure subject." Withal there is more breadth and freedom, more obtrusion of the foreground, and less care for perspective effects. There is also, it would seem, a fresh outbreak of the still-life craze—flowers and fruits massed together to show the artist's dexterity in colouring or in brush-work. It is no doubt a useful exercise for students, but most of us prefer our melons and marrows, our pansies and daisies, *au naturel*. "As large as life, and twice as natural," is a showman's appeal to a public that has more admiration for cleverness than for art; and one fears that a recrudescence of the flower-and-fruit painting will be followed in due course by a revival of the wax fruit and woollen flower folly of the days of our great-grandams. For the meagreness of the architectural department no apology need be offered: it stands excused by the present position of the architect; and the observation holds good for the sculpture, which obviously suffers from the absence of architectural stimulus. As a whole, the exhibition conveys the impression that for the moment art is marking time, with no very definite indication of the new directions it will take when the world is reconstituted and the map of life, as well as the map of Europe, is readjusted.

Exhibition of Water-Colours by the late Captain Charles Gascoyne.

Among the many sad losses sustained by the architectural profession as a direct result of the War, none is more to be deplored than that of the late Captain Charles Gascoyne, who, after being wounded and taken prisoner, suffered the cruel fate of dying in German hands. Captain Gascoyne occupied a prominent and in some respects unique position among modern architectural draughtsmen; for, although his bent was essentially architectural, his artistic abilities were far in excess of those required in the delineation of architecture *per se*. In addition to an uncommon gift of architectural draughtsmanship, he possessed all the attributes of the landscapist; and as a water-colourist pure and simple he could have won for himself considerable reputation and success. That he elected otherwise was distinctly to the gain of architecture. A number of his drawings, selected by Mr. Robert Atkinson, were recently on exhibition in the rooms of the Architectural Association in Bedford Square. They included a wide variety of subjects—from France, Belgium, Spain, Italy, Sicily, and

Morocco, as well as the home country—and, on the whole, the selection may be said to have shown the artist at his best. The pictures on exhibition have mostly been sold—for the benefit of the artist's widow; but some still remain to be disposed of. Architects and all others who can appreciate a rare artistic talent should take advantage of this opportunity of acquiring some example of the work of a highly gifted artist who in the service of his country has been cut off in the full vigour of a career of high achievement and higher promise. All inquiries should be addressed to Mr. Robert Atkinson at the Architectural Association, 35 Bedford Square, London, W.C.

* * *

The New Architect A.R.A.

With the election of Mr. G. Gilbert Scott, F.R.I.B.A., to the Associateship of the Royal Academy, architecture is now represented on that important body by seven members; the others, of course, being—Mr. Reginald Blomfield, Sir T. G. Jackson, and Sir Aston Webb (Academicians), and Sir Ernest George, Sir E. L. Lutyens, and Mr. Ernest Newton (Associates). Mr. Scott, as the architect of Liverpool Cathedral, the largest and most important ecclesiastical building of modern times, had very special claims to the distinction which has now been conferred upon him. Mr. Scott was educated at Beaumont College, Windsor, and served his articles with Mr. Temple Moore, F.R.I.B.A. He began practice in London in 1902, and sprang into fame in 1904 (when but twenty-four years of age) by winning the Liverpool Cathedral competition. Since that time he has enjoyed a wide and constantly increasing practice—mainly of an ecclesiastical character. Mr. Scott is now serving in the Royal Marine Engineers; but his new duties will permit him to exercise an adequate supervision over the Cathedral works at present in hand.



MR. G. GILBERT SCOTT, A.R.A.



MUCH of the charm of older buildings comes from the use of materials gathered in the locality. The later developments in transport facilities affected the source of supply, and buildings lost their local colour. Slate roofs are seen in places where tiles are made, and Midland machine-made bricks were used in the south almost next door to a brickfield.

Times and practices are changed by war. Shortage of transport localises sources of supply. Timber for buildings is taken from the nearest available growths, and local characteristics are once again apparent. The above photograph shows freshly hewn logs being unloaded from one of our lorries by a 5-ton electric crane. It will be converted on a 40-year-old rack-saw bench for national building work. Thus the old and the new do meet.

In the coming reconstruction period the need for utilising local resources will be just as great as it is now. Doubtless architects are advising clients to utilise timber at present standing on their own or adjacent estates.

HIGGS & HILL LTD.
CROWN WORKS, SOUTH LAMBETH RD. LONDON, S.W. 8

NOTES OF THE MONTH.

The Architects' Assistants' Welfare Committee.

A general meeting of architects' assistants was held at the Architectural Association, 35 Bedford Square, last month. Mr. H. H. Wigglesworth, who was in the chair, explained that the meeting had been called for the purpose of electing five assistants to serve on the newly formed Assistants' Welfare Committee. He said that there were at present many schemes under consideration in connexion with the reorganization of the architectural profession after the War, one of the first to be launched being this Welfare Committee, which is designed solely in the interests of, and for the benefit of, assistants. It is proposed that the new committee, which includes representatives of the R.I.B.A., the A.A., the Society of Architects, and unattached assistants, should deal with all matters affecting the welfare of assistants. There were many problems arising from time to time which would naturally be settled as between principal and assistant, but there were others which concerned the whole body of assistants, which could preferably be discussed by such a committee as is now formed. All problems dealt with by this committee should be regarded from the mutual point of view, and the constitution of the committee would afford an opportunity of exchanging views and harmonizing interests as between master and man which might sometimes appear to be conflicting. The Institute had nominated Mr. A. G. R. Mackenzie as their representative; the Society of Architects, Mr. R. Goulbourn Lovell; and the Architectural Association, Mr. H. H. Wigglesworth; and Mr. Yerbury had consented to act as secretary. The desire was that the majority of the committee should be composed of assistants. The speaker now proposed for election the following

assistants who had been nominated to serve on the committee: Mr. R. A. Duncan, Mr. F. S. Haynes, Miss E. Lowy, Mr. C. McLachlan, and Mr. Charles Pickford. Mr. A. O. Collard supported the election, and the nominations were then put to the meeting and agreed unanimously.

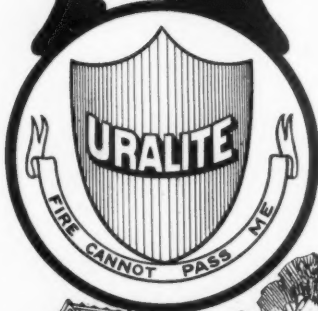
* * *

The Late Mr. W. F. Yeames, R.A.

Mr. William Frederick Yeames, R.A. (retired), whose death at the age of eighty-three took place on 3 May, was an artist of the popular order, depending more upon the skilful drawing of a "taking" subject than upon fine conception or individual presentation. Perhaps he was rather spoiled by his early successes, for he was made an Associate at the age of thirty-one; his "Amy Robsart," shown in 1877, was bought for a thousand pounds by the Chantrey trustees; and his "When did you last see your Father?" shown at the Academy Exhibition of 1878, secured his election to the full R.A. Afterwards much of his energy was taken up by teaching in the R.A. schools, by examiner's work at South Kensington, and by his duties as curator of the Painted Hall at Greenwich Hospital. He was the third son of William Yeames, H.B.M. Consul at Taganrog, and was born there in 1835. He studied art with George Scharf, of the National Gallery, who is best remembered as an industrious illustrator of classical encyclopædias and similar books; with F. Westmacott; and, in Florence, with Professor Pollastrini and R. Buonajuti. He married Anne, daughter of Major Winfield and niece of Sir David Wilkie, R.A.

Asbestone

TILES & SHEETS for ROOFING & LINING.




As used by the L.C.C., H.M. Office of Works, Admiralty, War Office, Metropolitan Asylums Board, and the leading Architects.

BEST FOR ROOFS.

BECAUSE (1) It is very light, and a far lighter superstructure can therefore be used.
(2) There is no loss by breakage, either in transit or fixing, as is the case with ordinary slate.

BEST FOR PARTITIONS AND CEILINGS.

BECAUSE (1) It is fire-proof, vermin-proof, and damp-proof.
(2) It is rapidly fixed to a wood or steel framing.
(3) It is dry when it is put up, and therefore papering and painting can be proceeded with immediately.



THE BRITISH URALITE

TELEPHONE No. CO. (1908), LTD.
LONDON WALL 85 GRESHAM ST.
3955 LONDON, E.C.
Northampton Depot—Lady's Lane.



SHELL — BRAND — FLOOR POLISH.

Messrs. HAMILTON have made a special study of the Preparation and Treatment of Floors, and will be pleased to confer with Architects and others with regard to such work.



Hundreds of the leading Institutions and Schools throughout the Kingdom have had their Floors treated by the "Shell" method.

ARCHD. H. HAMILTON & Co.
Possilpark, Glasgow.

Telegrams: "SATISFY."

"KING" Jointless Flooring

SUBSTITUTE

:: *for* ::

FLOOR BOARDS

:: *and* ::

LINOLEUM

Made in Various Colours and
Degrees of Hardness.

J. A. KING & CO.

181 Queen Victoria St., E.C. 4

Telephones
Cent. 715 - City 2218.

Telegrams
"KINOVIQUE, Cent. London."

The

A1 ENGRAVING CO LTD

PHOTO-ENGRAVERS

DESIGNERS

A1

BLOCKS

ELECTROTYPERS

ILLUSTRATORS

Studios & Works, 5, Tudor Street, London, E.C.

TELEPHONES:- 987, HOLBORN. 8737, CITY. TELEGRAMS:- "AWONENGO," LONDON.



Reinforced Concrete is being strongly advocated to-day for modern buildings.

Hy-Rib Reinforcement enables concrete walls and roofs to be very rapidly erected without the use of timber shuttering.

A Hy-Rib wall costs little more initially than corrugated iron. After four years it is cheaper.

Hy-Rib economises in Timber, Time, and Cost.

Send for particulars to the Hy-Rib Dept.,

THE TRUSSED CONCRETE STEEL CO., Ltd.,

22 Cranley Gardens, South Kensington, S.W. 7.

Telephone : 1296 Victoria.

Telegrams : "Kahnerete, London."

